PREHISTORY OF THE TURTLE MOUNTAIN DISTRICT

AN INITIAL SKETCH

Papers in Manitoba Archaeology
Popular Series No.2

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Culture, Heritage
and Recreation
Historic Resources

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IMPORTANT

Archaeological sites constitute a very fragile resource that requires careful handling. Archaeologists have devised a wide range of methods and techniques whereby archaeological information can be gathered from the field in an orderly and scientific fashion. Inasmuch as such activity invariably affects what we stand to learn about our heritage as Manitobans, it is incumbent upon the Province to ensure that these resources are handled properly via these special methods and techniques. To that end, anyone wishing to collect or excavate for archaeological objects is required under Section 53 of the Heritage Resources Act to obtain a permit from the Province to do so. This allows the appropriate officials to specify the nature of the work to be done in light of the collector's or excavator's qualifications and experience. Such a permit may also stipulate that the results of investigation must be reported to the appropriate Provincial agency. If all findings are so reported, there exists the opportunity to have new information studied and presented to the public by a central authority established for that purpose. The book you are now reading is a case in point.

If, quite by accident, you come upon an archaeological object, or an item that you suspect is an archaeological object, you are required under Section 46 of the Act to report the discovery to the Minister. If it appears that the object is still in place in the ground, that is, it has not been totally displaced from its natural setting or stratum, it should be left there and the Minister informed of it. Such a discovery could prove very important to our understanding of local or regional history.

For further information, please contact:

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Dedication

This booklet is dedicated to

Mr. William Moncur

Pioneer Archaeologist of Southwestern Manitoba

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INTRODUCTION

This booklet stems from my research in the Turtle Mountain region during the summer of 1980. During that time, I was employed by the Historic Resources Branch to locate and document archaeological sites on Turtle Mountain and the adjacent Boissevain Plain (Fig. 1). The results of this research have been summarized in a technical report that is on file with the Historic Resources Branch of Manitoba Culture, Heritage and Recreation, Winnipeg. The purpose of this booklet is to inform the public about the archaeology and prehistory of the region. As such, it is written for the general reader with an interest in regional prehistory, and has been kept as free as possible from technical terms and jargon.

At various places throughout this booklet you will find a person's name and a date appearing in brackets at the end of a sentence or paragraph; for example, (Deal 1971:14). This is an acknowledged form of citation used in scholarly writing. It tells you that the facts or ideas presented in the preceding sentence or paragraph came from a book or article written by the person named. The date given is the year of publication. The numeral following the colon indicates the specific page you can find these facts or ideas on. You may find this annoying, as it does tend to interrupt the flow of the sentence. Should facts or ideas be expressed which you find particularly interesting, however, the reference allows you to locate their source and pursue the subject. You will find all of the authors cited in this booklet listed in the bibliography and you are urged to consult these sources wherever interest develops. Many of these publications will not be available in your local library; however, the librarian will be able to order them in for you upon request.

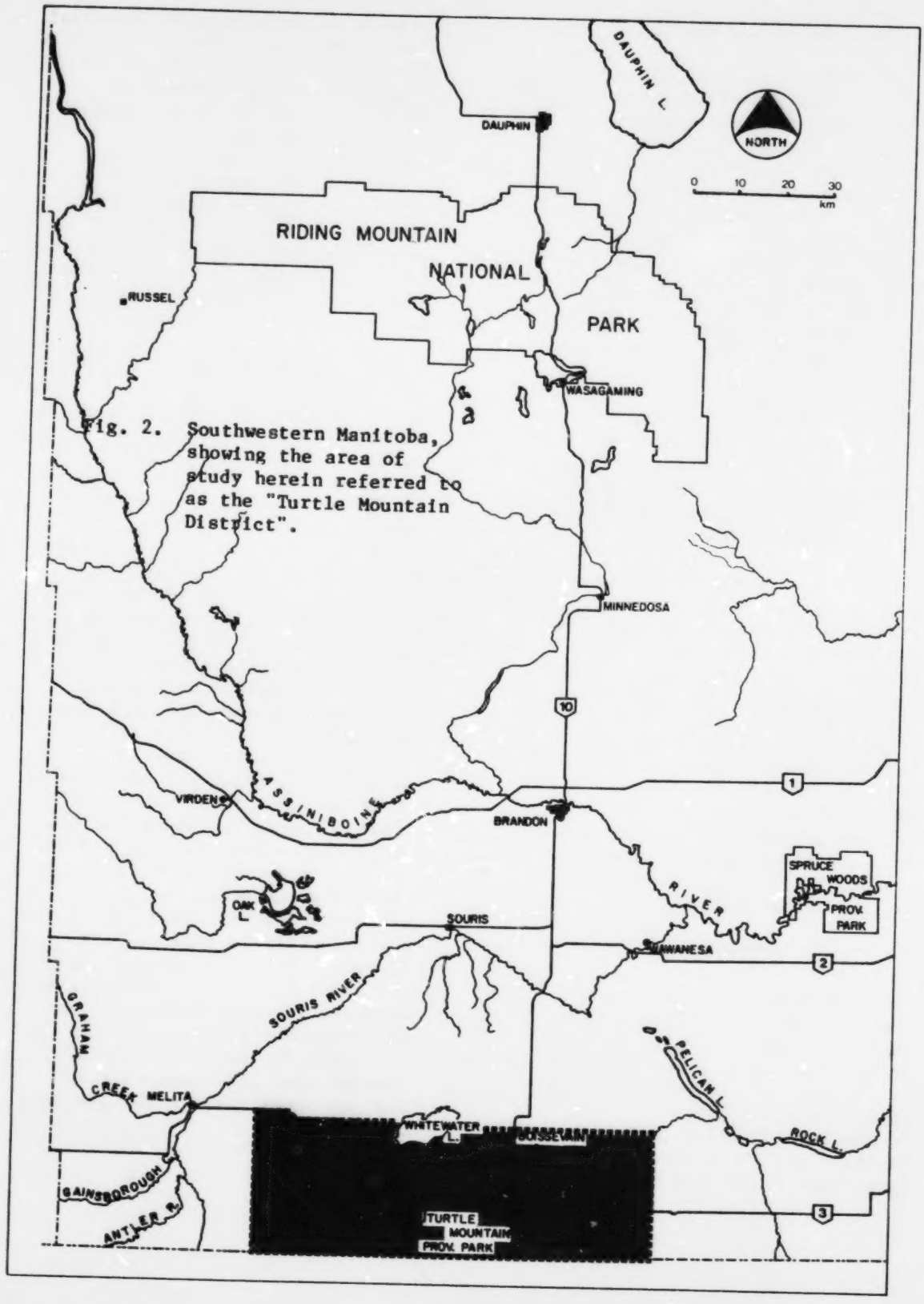

Fig. 2. Southwestern Manitoba, showing the area of study herein referred to as the "Turtle Mountain District".

In this booklet you will also find words such as "Complex" (for example, McKean Complex) and "Period" (for example, Early Prehistoric Period). A complex is the sum total of all the archaeological sites, and the distinctive archaeological materials, that were left by the people of certain groups within a relatively narrow time period. Often interchanged with "Culture" and "Phase" in archaeological literature, a complex is usually named after a town or geographical feature where it was first discovered. Arrowhead types, too, are frequently named this way. A period refers to a longer time span. Different periods are represented by major technological changes (L. Syms, personal communication). Several complexes can be found within a single period.[1]

The three chapters in this booklet cover a range of topics that I am sure you will find interesting. The first chapter briefly discusses archaeology as a scientific discipline. After reading this material, you will be able to better understand and appreciate the following chapters.

Chapter 2 considers the natural history of Turtle Mountain. In order to understand prehistoric peoples, we must also have some knowledge of the environment and conditions in which they lived. In Chapter 3, you will find photographs of artifacts from the Moncur Collection assembled in the Boissevain area. This collection provides a good representative sample of the materials found in the general region; to a large extent, it has allowed us to trace the prehistory of the Turtle Mountain district. An illustrated regional overview of prehistory is also given in Chapter 3. This has been purposefully kept general and brief, and should be regarded as a preliminary outline of developments which future research may support or disprove. The artist's sketches are included to help you visualize scenes of daily life in prehistoric Manitoba. The sketches are meant to remind us that, through all our discussions of arrowheads and artifacts, we are really interested in what these archaeological remains can tell us about the people who made and used them.

If you have questions arising from this booklet, wish to know more about Manitoba's prehistory, or would like to enquire about becoming involved in archaeology (perhaps making it your career!), please contact the Archaeology Section, Historic Resources Branch, 177 Lombard Avenue, Winnipeg, Manitoba, R3B 0W5, telephone 945-4392.

CHAPTER 1

ABOUT ARCHAEOLOGY

The word "archaeology" is formed from the two Greek roots "archaios", meaning "old or ancient", and "logia" meaning "the study of". Hence, the word archaeology literally refers to the study of old or ancient things and, implicitly, the people who

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1 Editor's note.

made them. Archaeology is not primarily concerned with rocks -- the domain of the geologist -- or with dinosaur bones -- the domain of palaeontologists. Archaeology is the study of people and their works in bygone times.

We must first view archaeology in relation to its parent discipline of anthropology before we can appreciate the unique role that it plays within the social sciences. The word anthropology is formed from the two Greek roots "anthropos", meaning "man", and "logia" which, as we have already noted, means "the study of". As the study of humanity, anthropology seeks to generalize about the nature of people in all places and in all times. We can therefore say that anthropology as a whole is "cross-cultural" and all-encompassing, as it does not restrict itself to any particular place or time period. Because humanity is such a multifaceted phenomenon and people's lifeways, or "cultures", are so diversified, anthropology has been broken into four major subfields which allow us to focus on specific components of the general study. These subfields are:

Linguistics - the study of human speech and languages;

Physical Anthropology - the study of the human body, with particular regard to its biological evolution;

Ethnology (sometimes called cultural anthropology) - the study of contemporary people's cultures and the nature of culture in general;

Archaeology - the study of people in bygone times.

These subfields are not mutually exclusive; rather, the specialists in each interact with and assist one another. For instance, we, as archaeologists, may want to know how <u>living people</u> make pottery so that we can better understand the techniques used by <u>prehistoric people</u>. In this case, we will turn to ethnography, the descriptive branch of ethnology. On the other hand, an ethnologist who wants to know how long a particular technique of pottery manufacture has been used and how widespread it is can turn to archaeology for the answer. In another example, the archaeologists may wish to know about the diseases that affected a prehistoric population. In this instance, we will study their skeletal remains and thus become involved in physical anthropology. On the other hand, a physical anthropologist might want to know how long a particular disease has plagued humankind, in which case an archaeologist would be consulted. The four subfields of anthropology, then, have a "symbiotic" relationship; that is, they complement and inter-relate with one another in a mutually beneficial manner. In a larger sense, the ethnologist, physical anthropologist, linguist and archaeologist are all anthropologists; each sub-field signifies the approach and emphasis that the researcher chooses to take in the study of humanity.

Although the general objectives of all anthropologists remain the same, the techniques characteristic of the various approaches are diverse: the ethnologists rely upon their tape recorders, the linguists compile grammars, and the physical

anthropologists use a range of gadgetry adapted from medical science. But surely the most bizarre "tool-kit" in anthropology is that of archaeologists. Besides shovels, trowels and whisk brooms, the archaeologists use dozens of aids in their studies of culture: radiocarbon assays, soil testing chemicals, aerial photographs and digital computers are all found in their tool kit. All of these seemingly unrelated instruments and the techniques that go with them are integral parts of modern archaeology (after Thomas 1974:3). Good discussions of archaeological field and laboratory methods can be found in Fagan (1978), Robbins and Irving (1965), Thomas (1974) or Jennings (1974).

Three basic objectives characterize archaeological research:

1. the reconstruction of cultural chronologies - when?

2. the reconstruction of extinct lifeways - how?

3. the search for cultural processes - why?

These objectives are both "sequential" and "hierarchical", that is, each step or objective must be attained in this order before the next one can be attempted. For example, before we can ask how or why, we must know when. The control of "time depth" or antiquity is one of archaeology's greatest assets -- it allows us to analyze long cultural evolutionary sequences and to place developmental segments in proper order. The reconstruction of extinct lifeways is the study of past cultural adaptation and modes of survival. This aspect of the study tells us how a particular people lived. The third and most elusive aim of archaeology is the search for cultural processes. Having established when and how a particular people lived, we want to know why -- why did they choose to follow a specific lifeway and why did this remain the same, or change, through time? In short, we want to explain the phenomena of the past. Ultimately, our goal is to understand the factors which govern the adaptation of all people in similar social and environmental habitats regardless of time and space. To do this is to discover a universal "truth" and leads us back to the basic objective of anthropology -- to be able to generalize about all people (human nature) in all places, in all times (Thomas 1974).

The past is imperative to our present and future. If we do not understand our past, we do not understand ourselves. We face an uncertain future without knowing where we came from or how we arrived here. Archaeology is the greatest reference we have for human experience. The totality of this experience is documented in the archaeological record; it is left to us to learn how to interpret it.

CHAPTER 2

TURTLE MOUNTAIN: THE ENVIRONMENTAL SETTING

Topography and Deglaciation

It is not known precisely when Turtle Mountain first appeared as the dominant feature of the

landscape of what is today southwestern Manitoba. Geologists have been unable to ascertain whether the elevation is due to an upward thrust of the underlying bedrock or is a deposit of huge glacial erratics (massive blocks of shale or sandstone deposited by glacial action [Deal 1971:14]). A third possibility is that Turtle Mountain is the erosional remnant of a general uplift in central North America and, as such, is an outlier of the Missouri Coteau (Bamburak 1978:29). The following discussion is adopted from Deal (1971).

During the last glacial advance and subsequent "retreat", processes were at work that resulted in today's undulating topography along the top of the mountain. Because Turtle Mountain stood as a topographic high prior to this last glacial phase, it presented an obstacle to the advancing ice sheet. The glacier engulfed the entirety of the mountain but the icy mantle subsequently became stagnant. Ensuing ice floes were split as this static area was encountered and, in the process, massive amounts of debris were dumped over the stagnant ice. As the ice melted, it added to the rubble and an insulating blanket several feet thick quickly developed. This blanket, in turn, reduced the melting rate. From approximately 13,000 years ago onwards, the climate was favourable to deglaciation and the ice sheet continued to thin; however, it probably took over 3000 years for all of the buried stagnant ice to melt away. Although several minor glacial advances took place in the region, the ice margins had retreated several hundred kilometres to the north of Turtle Mountain by 12,500 years ago. The stages of deglaciation in the region are illustrated in Figures 2 and 3. It should be noted that Whitewater Lake was formed during an early stage of deglaciation and appears to be a remnant of glacial Lakes Boissevain and Goodlands (Fig. 2 b,c).

The insulating blanket of superglacial, or surface, sediment on Turtle Mountain allowed for the formation of small lakes and spruce forests by about 12,800 years ago. As debris accumulated in the lake bottoms and the buried ice gradually melted, topographic inversions occurred that eventually produced the modern landscape. The prominent hill located just to the north of Charlton Lake, often referred to as The Turtle's Back, may well be an example of this topographic inversion process.

The Palaeo-Environments

Studies of Ice Age snails collected in the Turtle Mountain area indicate that between 11,000 B.C. and 8500 B.C., the climate was more moist than today; a result of more precipitation, less evaporation, or both. Late glacial times probably experienced cooler summers and milder winters than today. Spruce forests dominated the landscape.

A major warming trend intensified between 8500 B.C. and 8000 B.C. that changed the climate from humid to subhumid-semiarid. This terminated the initial phase of forest cover over most of the region, although Turtle Mountain itself may have remained partially forested. Most lakes in the area

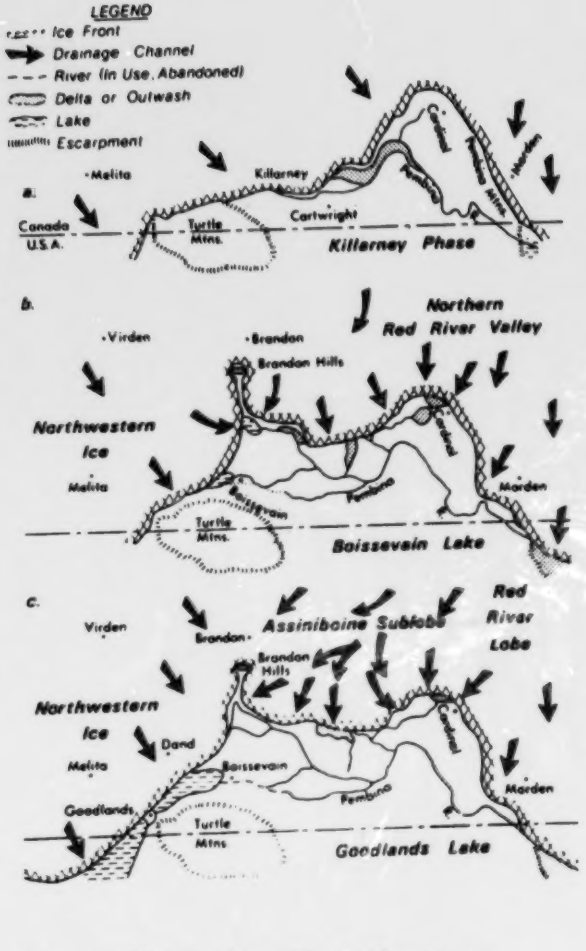

Fig. 2. Deglaciation of southwestern Manitoba during the Killarney (a), Boissevain Lake (b), and Goodlands Lake (c) Phases.

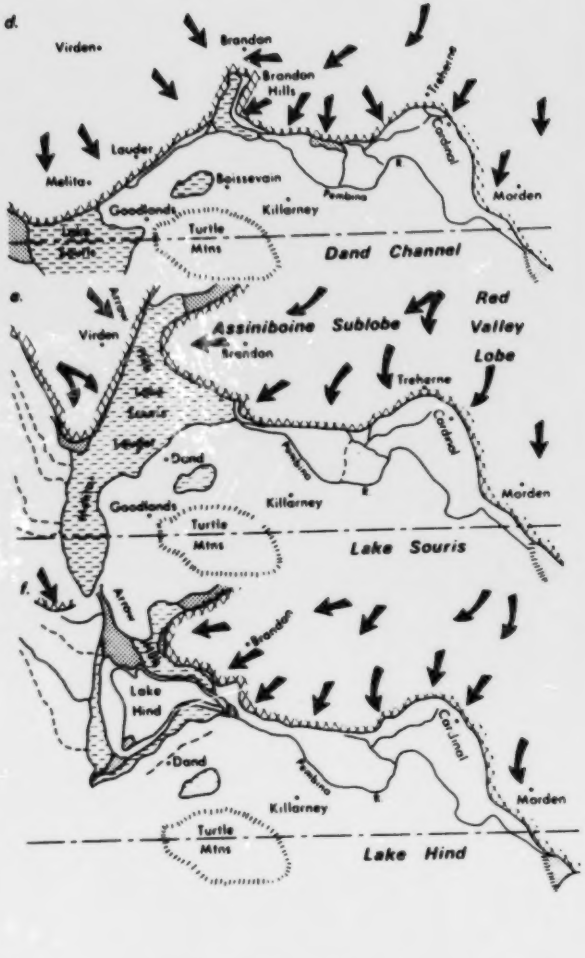

Fig. 3. Deglaciation of southwestern Manitoba during the Dand Channel (d), Lake Souris (e), and Lake Hind (f) Phases.

probably shrank in size and many were reduced to intermittent bodies of water. From 8500 B.C. to 6500 B.C., the climate was much as it is today.

During the succeeding 4000-year period from 6500 B.C. to 2500 B.C., the regional climate was more arid than it is now. The climate was similar to that on the Plains during the 1930s: less precipitation, warmer temperatures, or both. Previously-existing ponds and lakes either disappeared or were reduced to sloughs, and the extent of grass cover outside of the uplands diminished. During this interval, referred to as the "Altithermal", the forest vegetation on Turtle Mountain also became restricted; perhaps, entirely eliminated. Nevertheless, as we shall see below, southern Manitoba appears to have been somewhat better off than areas to the south and west.

For the past 4000 years or so, from 2500 B.C. to the present, the climate has remained much the same as it is today. Turtle Mountain became re-forested and the established prairie of the surrounding area was maintained. Intermittent and permanent lakes and ponds reappeared on the landscape. It is probable that periodic, short-term reversions to grasslands occurred on Turtle Mountain during this time and, similarly, parkland vegetation may have occasionally invaded the adjacent prairies (cf. Pettipas 1981).

Fossils of the animals that inhabited the early post-glacial setting have not been found in the Turtle Mountain area. On the basis of finds from elsewhere in the province, however, it is possible that mastodons, mammoths, horses and giant bison roamed throughout the region during the closing phases of the Ice Age. If so, these animals vanished as they did elsewhere with the onset of the warm, dry conditions around 8000 B.C. -- 10,000 years ago. Their successors were the animal populations inhabiting the area today, except for certain species of bison (commonly miscalled "buffalo" since the days of the fur trade), known as Bison antiquus and Bison occidentalis, that became extinct sometime afterwards. Several places within southern Manitoba have yielded bison bone dating to the Altithermal period. These finds indicate that conditions in our area may not have been as severe as those on the "High Plains". Of course, vast herds of the modern species of bison frequented the region until their demise during the 1800s.

For a general review of the early environments, animals and people of Manitoba, you can refer to Pettipas 1970, 1976a.

The Modern Environment

Soils

The soils of the Turtle Mountain area developed on glacial boulder till that varies in thickness from less than 16 metres on the Boissevain Till Plain (except for Whitewater Lake vicinity where depths of over 30 metres are reported), to as much as 160 metres on the Turtle Mountain Upland (Eilers, et al. 1978:8). The soils of the currently forested uplands have

been described as having "Grey Wooded" properties: "The native vegetation consists of deciduous forest. Because of the long established tree cover the well drained soils have developed grey wooded characteristics" (Ellis and Shafer 1974:68).

In contrast, the Canadian soils classification (Clayton, et al. 1977) lists the soils of Turtle Mountain as "Chernozemic"; that is, dark-coloured, humus-rich soils that developed in temperate to cool climates of relatively low humidity typical of grassland or transitional grassland-forest communities (Ibid:100). This evidence suggests that Turtle Mountain has experienced a fluctuating grassland-to-forest environment, with the former being dominant through time. Undrained basins that contain peat or meadow soils are associated with these well-drained soils.

Away from the uplands, soils were developed under mixed tall and short prairie grasses. These soils are characterized by a shallow black to very dark brown "A" horizon, followed by a drab brown "B" horizon. Soil textures are primarily heavy loams to light clay loams. Closer examinations reveal numerous discrete subdivisions within the Waskada and Boissevain Till Plains, and the Whitewater Lake area (cf. Eilers, et al. 1978; Ellis and Shafer 1974).

Climate

The modern climate is subhumid even though the altitude of Turtle Mountain results in cooler temperatures, lower evaporation rates and more precipitation than for adjacent areas similarly classified as subhumid. One measure of this variation is average annual precipitation rates: during the four-year period 1967-1970, the annual average for Boissevain was 45.4 centimetres; for the same period, the International Peace Garden had an average of 70.6 centimetres per year (Eilers, et al. 1978:19).

During extremely arid climatic phases such as the one in the 1930s, most of the lakes on Turtle Mountain were dry. Even Whitewater Lake dried up for several months of each year from 1934 to 1940 (Ransom and Hochbaum 1972). Palliser (1863:45) reported that five years prior to his visit to the area during the late 1850s, Whitewater Lake was known as only an intermittent source of water. From these data we can assume that a similar situation occurred during considerable stretches of prehistory, particularly between 8500 and 4500 years ago (6500 B.C. - 2500 B.C.) when a major arid climatic phase dominated the region.

Vegetation and Animal Resources

Grassland vegetation characterizes the Boissevain Plain and adjacent regions. There is a mixture of short and tall prairie grasses associated with various herbaceous types of vegetation. The Mountainside Escarpment area is classified as grassland on the lower slopes with grassland and forest on the upper portion. The latter area has a treed landscape with short and tall grasses and an herbaceous plant mixture. Turtle Mountain itself is, of course, classified as a forest region with

vegetation consisting of deciduous trees and shrubs and an undergrowth of herbs and grasses. Trembling aspen, White Birch, Bur Oak, Green Ash, Manitoba Maple and Black Poplar are the dominant tree species found scattered over the mountain (Eilers, et al. 1978:24). For a more thorough examination of floral communities found in the numerous microenvironments of Turtle Mountain, you are referred to the Turtle Mountain Resource Inventory (Smith and de Smit 1979).

Native food resources within the last few thousand years in the Boissevain area would have included antelope, deer, elk, bison, rabbits, gophers, coyotes, waterfowl, muskrats, skunks, badgers and raccoons. This list is essentially the same for Turtle Mountain - with the additions of moose, caribou, beaver, bears, porcupine, otter and lynx. Fish resources were probably also available at various times.

CHAPTER 3

ARCHAEOLOGY IN SOUTHWESTERN MANITOBA

Since the turn of the century many interested lay-people have been collecting prehistoric artifacts in Manitoba. It is only recently, however, that, through the work of professional archaeologists, the extent and importance of the prehistoric record in Manitoba has become known. In southwestern Manitoba, Mr. Chris Vickers of Baldur was one of the first researchers to publish articles on the archaeology of the area. In the early 1950s, Dr. R.S. MacNeish, then of the National Museum of Canada, did some research in the southwest; he was greatly assisted by many local persons including Mr. Vickers and Mr. William Moncur of Boissevain. The Glacial Lake Agassiz Survey from the University of Manitoba also did some preliminary work in the area from 1965-1967. Dr. Ronald Nash, formerly of the Manitoba Museum of Man and Nature, recorded many sites in the Melita-Lyleton area in 1972 and 1973. Since that time, Dr. E.L. Syms, formerly of Brandon University and now with the Manitoba Museum of Man and Nature, has initiated and conducted most of the archaeological research in the southwest. The 1980 survey of Turtle Mountain and the adjacent Boissevain Plain was sponsored by the Historic Resources Branch of the provincial government. In spite of these activities over the years, archaeology in southwestern Manitoba and in the province in general is still very much in its infancy. Although a considerable amount of data has been collected, our knowledge of the prehistoric inhabitants of Manitoba is still a long way from being complete.

We are able, however, to place many of our findings in chronological order. That is, we are able to separate the earlier artifacts from those of more recent origin. This allows us to speak of three distinct periods of cultural development: Early Prehistoric (9500 B.C.-5500 B.C.); Middle Prehistoric (5500 B.C.-1 A.D.); and Late Prehistoric (1 A.D.-1700 A.D.). Different styles and types of artifacts tend to characterize each period. We know the approximate ages of the artifact styles because they have

been found in radiocarbon-dated sites in other parts of Manitoba and elsewhere.

The method of radiocarbon-dating was discovered in 1949. It has been the cornerstone of archaeological time-controls since then, and is continually being refined. The theory behind radiocarbon dating is relatively simple. Radioactive carbon-14 isotopes are continuously formed in the upper atmosphere from atmospheric nitrogen through the action of neutrons produced by cosmic rays. (Isotopes are any of two or more forms of an element having the same atomic number but different atomic weights; neutrons are the elementary, uncharged particles of an atom.) The isotopes form a constant proportion of atmospheric carbon that is taken up by all living things. When an organism dies, the exchange of molecules stops and the carbon-14 atoms decay at a constant, known rate. Scientists can then measure the remaining radioactivity and determine how much time has elapsed since the death of the organism. The carbon used in this dating technique is found in archaeological sites in such forms as charcoal from hearths, vegetable remains and bones (Coles and Higgs 1969).

The materials used in radiocarbon dating, then, are organic; however, the date obtained from such matter also applies, by association, to stone tools and other artifacts found with it. Based on this, we can make two observations: first, certain classes of artifacts made during different periods in prehistory are often different in form, shape and style; second, certain artifact forms are consistently associated with specific time periods. Thus, when we find an artifact we can often conclude, based on its occurrence in radiocarbon-dated sites elsewhere, that it was made during a particular time period.

The artifact types that are most commonly used to indicate relative age, that is, age based on association, are "projectile points". There are three kinds of projectile points: spear points, dart points, and arrow points. Arrow points (or arrowheads) were a relatively recent arrival in this area. They first appeared around 200 A.D., and marked the introduction of the bow and arrow. Prior to that time the "atlatl" or dart thrower was the most commonly used weapon (see Figure 13). You will find many projectile point types illustrated in the following section.

The Moncur Collection

The Moncur Collection constitutes one of the finest records available today of the extensive prehistory of the Turtle Mountain region. The artifacts in the collection document the arrival of some of the first inhabitants of Manitoba, perhaps as early as 10,000 years ago, and continue the story in an unbroken sequence well into the Historic Period. To both the professional and the lay-person, the Moncur Collection is a priceless reference to the prehistory in southwestern Manitoba.

Contributions of William Moncur

Born in 1910, Bill Moncur has always lived on his farm just

north of Boissevain. For more than half a century, he has been a familiar figure trudging across the fields around Boissevain and the surrounding district. He still recalls with excitement the day in 1924 when he found his first arrowhead, to be joined by a second before the day was over. The differences in form and colour between these first discoveries triggered a curiosity that motivated several searches over the ensuing decades. Often discouraged by those around him who regarded any interest not connected with farming as useless, we are most fortunate that he persisted in his study. It is with gratitude today that we recognize Bill Moncur as one of the pioneer archaeologists of southwestern Manitoba.

We do not do full justice to the man by recognizing only this single facet of his contributions to southwestern Manitoba. In addition to archaeology, he has always maintained an active interest in the history of his region. In 1936, Mr. Moncur began collecting pioneer stories and mapping the locations of historical sites in the Boissevain region. This research would eventually form the basis for the Beckoning Hills volume published in 1956 to mark the 75th anniversary of the Boissevain district. He has also been a resource person for several other books written about the general area. In 1970, he became the administrator of the Manitoba Agricultural Museum at Austin and served in this position until 1979 -- in spite of an intervening attempt to retire. The Excellence In Life In The Valley Award was presented to him in 1973 by the Red River Valley Historical Society for his work as a distinguished author and museum developer. In 1976, he received the Heritage Development Hall of Fame Award for his outstanding work at the Manitoba Agricultural Museum. The present booklet constitutes one more small tribute to a remarkable man.

Introduction

Only a selected few of the artifacts in the Moncur Collection are illustrated on the following pages. These have been chosen as representative of the total range of artifacts found in the Turtle Mountain region to date. Where possible, they have been identified and their locality given.

The catalogue presented here is by no means complete. Time constraints did not allow me to record specific measurements or make individual observations. Other researchers wishing to use these data will find them lacking in a quantifiable sense; however, at least an initial effort has been made. Future research on this collection is warranted and it is hoped that such will be initiated soon.

The first part of the following catalogue deals with projectile points. The general reader is reminded that these artifacts may have performed secondary functions such as cutting, scraping or piercing; all suggested dates are estimates. With some of the earlier types that have an extensive range of distribution, we can only note a similarity of form without claiming that all Canadian

specimens in fact belong to the type. There is always a range of variation in any projectile point type. Some of the specimens illustrated here share attributes of two point styles and hence both type names are used in their identification. In other instances, when a point's form is very similar to, but not exactly that of, a known type, the point is assigned the type name with the suffix "-like" added.

Folsom (Plate 1). Folsom atlatl points have been excavated from archaeological sites in New Mexico, Texas, Colorado and Montana. Surface finds extend their range throughout most of the western United States and into Manitoba, Saskatchewan and Alberta. At excavated sites, these points are consistently associated with extinct species of bison. Estimated time range is given as 9000 B.C. to 7000 B.C. (Jennings 1974).

Agate Basin (Plates 4, 5). These spear or atlatl points have an extensive distribution from as far south as Texas and New Mexico up through Colorado, Wyoming, Montana and all of the states bordering these on the eastern side. They are also quite numerous in Manitoba, Saskatchewan and Alberta (Irwin 1971:50). They appeared early in the generalized Plains big game hunting traditions and can be assigned approximate dates of 8500 B.C. to 5000 B.C.

Plainview (Plate 3A, B). Plainview atlatl points occur from Texas to Montana and from Northwestern Ontario to Alberta. Generally speaking, they were manufactured between 8500 B.C. and 6500 B.C.

Alberta (Plate 3C). These projectile points have been found in Colorado, Wyoming, Montana, Kansas, Nebraska and the Dakotas (Irwin 1971:51). They also extend up to southwestern Manitoba and into Saskatchewan and Alberta. Their estimate of age is 7500 B.C. - 6500 B.C.

Scottsbluff (Plates 2, 3E) and Eden (Plate 3D). These two point types belong to what is known as the Cody Complex, which has an extensive distribution. In the United States, the Cody Complex is found from Texas to Montana and in the east from Kansas to Wisconsin. In Canada, Cody Complex materials have been recovered from Northwestern Ontario, Manitoba, Saskatchewan, Alberta and northeastern British Columbia (Irwin 1971:51). The age estimate of this complex is 6800 B.C. - 6000 B.C.

Oxbow (Plates 6C-J). Oxbow atlatl points have been found in Manitoba, Saskatchewan and Alberta, as well as Minnesota, Wyoming and Montana. They occur in a variety of environmental settings including plains, prairie, parkland and boreal forest (Saylor 1979b). Chronologically, they appear between 3300 B.C. and 1000 B.C., although some late carbon-14 dates suggest they may have been manufactured well into the first millennium A.D. at Oak Lake in southwestern Manitoba (Haug 1976).

McKean-Duncan-Hanna (Plates 6A; 7; 8A-C). These projectile point types are considered as a group, because they are all "members" of the McKean Complex. They are encountered both individually and in association with one another.

Plate 1. Folsom point from just south of Whitewater Lake. (About 2 1/2 times actual size)

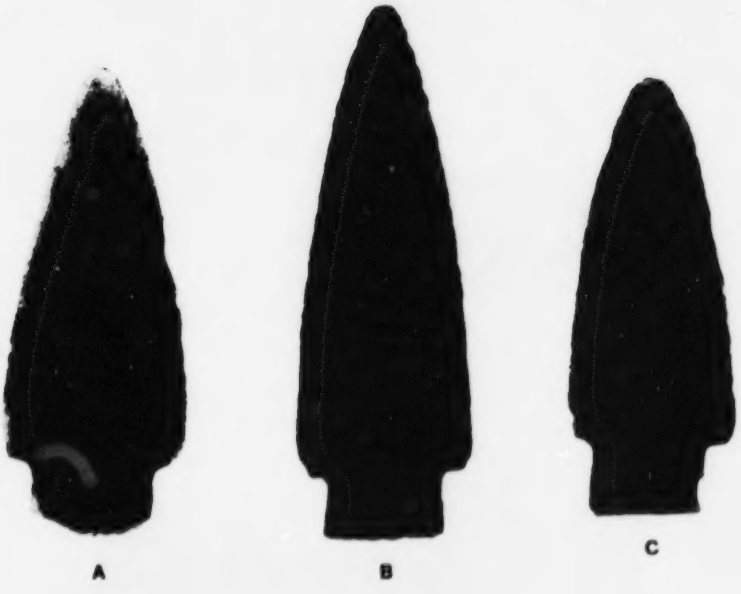

Plate 2. Scottsbluff points. A -- found due north of Boissevain, J. Nelin farm; B -- found 4.8 kilometres WSW of the Village of Whitewater; C -- found on the Ward Caldbick farm due west of Whitewater Village. (About 3/4 actual size)

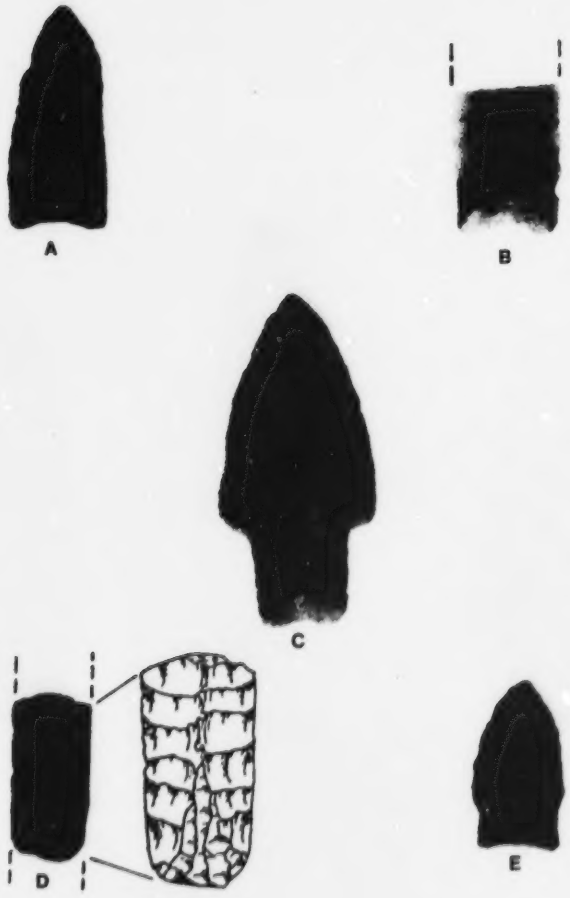

Plate 3. Plainview-like points (A, B) from the Moncur farm just north of Boissevain. C -- an Alberta point from Naples Siding, 6.4 kilometres west of the Whitewater townsite. D -- the base of an Eden point from the Moncur farm. E -- a miniature Scottsbluff-like point from the Moncur farm. (About 3/4 actual size)

Plate 4. Agate Basin points from south of Whitewater Lake. Dashed lines indicate fragmentary condition. Actual size.

Plate 5. Agate Basin points: A and B are bases, C is a blade portion; D and E are complete. A-C are from the southern Whitewater Lake area, D and E are from the Richview area. (About 3/4 actual size)

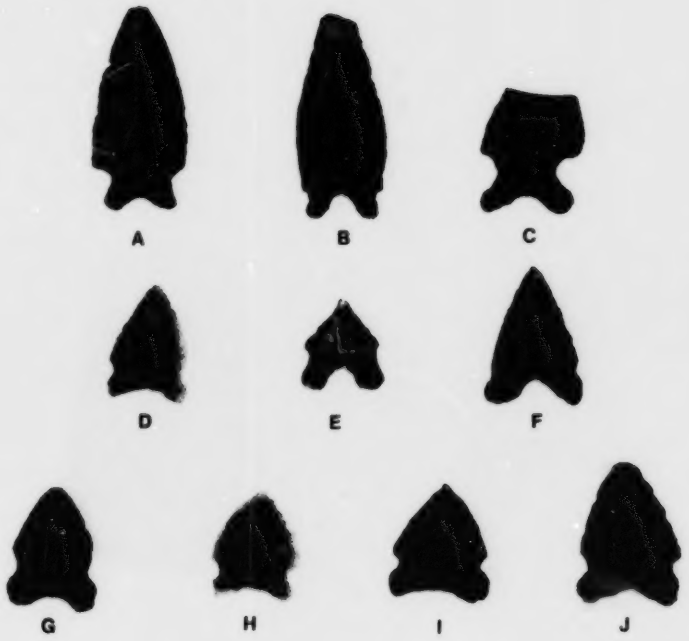

Plate 6. A -- Hanna point from Wakopa; B -- Oxbow-McKean-like point from Ninga; C-J -- Oxbow variations (C is from Ninga; the remainder are from the Moncur farm.) (About 2/3 actual size)

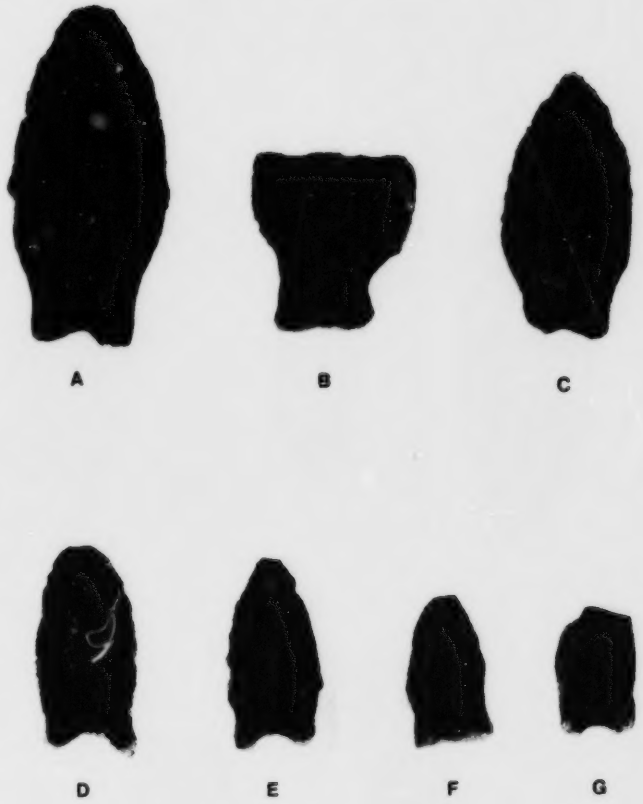

Plate 7. A -- Duncan point, from the Old Brock School near Goodlands; B -- stemmed point from the Moncur farm; C -- Duncan point from the Moncur farm; D, E and G -- McKean points from the Moncur farm; F -- unidentified, Moncur farm. (About 3/4 actual size).

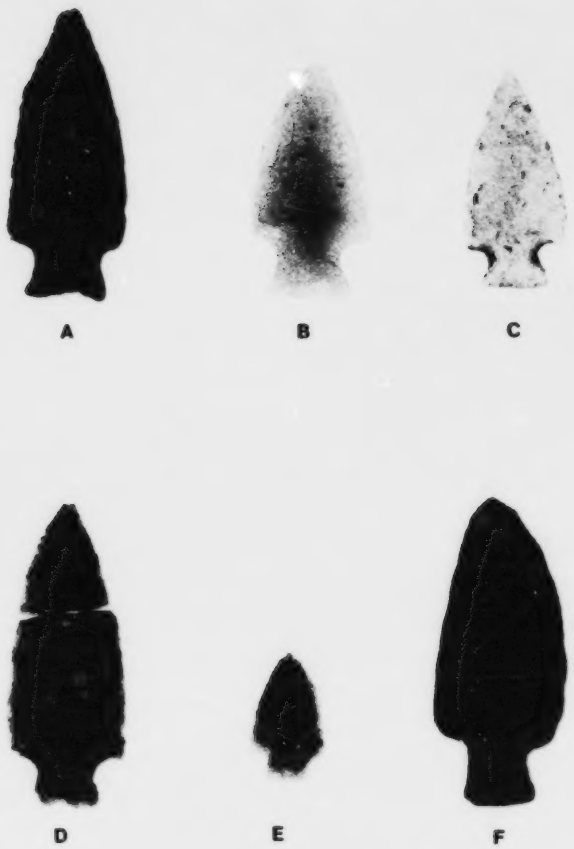

Plate 8. A -- Hanna point from the Whitewater-Mountainside area; B, C -- Hanna points from the Moncur farm; D, E -- Sonota-like points from the Moncur farm; F -- Sonota-like point from the Whitewater-Mountainside area. (About 3/4 actual size)

Generally speaking, Duncan and Hanna points represent the stylistic evolution of the basic McKean form but occur later in time. McKean Complex atlatl points have been found in Manitoba, Saskatchewan, Alberta, Wyoming, Montana, Colorado, Nebraska, Idaho, Utah and the western parts of the Dakotas (Saylor 1979c). The McKean Complex covers the time period from 3000 B.C. to 1000 B.C., although some anomalous A.D. dates have been reported from Oak Lake in southwestern Manitoba (Haug 1976).

Pelican Lake (Plates 9, 10, 11). These atlatl points have been found in Manitoba, Saskatchewan, Alberta, Wyoming, Montana and Nebraska. They occur in prairie, plains, parkland, foothill and boreal forest environments (Saylor 1979a). A temporal span from 1000 B.C. to 100 A.D. has been assigned to these projectile points (Reeves 1970:158), and several varieties have been defined (Kehoe 1974:104).

Besant (Plates 12, 13). Besant dart points have a distribution across Manitoba, Saskatchewan, Alberta and Montana. Besant points have also been found in the Dakotas and Nebraska (Saylor 1979b). They are, therefore, essentially a Plains manifestation. Temporally they appear between 1 A.D. and 700 A.D. Several varieties have been described (Kehoe 1974).

Sonota (Plates 8 D-F, and 14 A-H). Projectile points of this type are mainly found in the Dakotas and southern Manitoba, although occurrences have been reported from Saskatchewan and Alberta. Dates for Sonota range from 100 B.C. to 1000 A.D., although on the Canadian Plains they appear between 250 A.D. and 800 A.D. There is some variation in the forms (Callaghan 1978; Tole 1978).

Avonlea (Plate 15). These projectile points have been found in Montana and the southern regions of Manitoba, Saskatchewan and Alberta. Their time range is between 200 A.D. and 700 A.D. They probably represent the first introduction of the bow and arrow on the northern Plains and are often associated with large-scale bison drives (Kehoe 1966, 1973).

Prairie Side-notched (Plates 16 B, D, G-I; 17 I). This point form is very widespread, although the highest frequencies of occurrence are reported from the northern section of the northern Plains and the southern section of the northern woodlands. Estimated time range places these points at between 700 A.D. and 1400 A.D. They are arrowheads in the true sense of the word and would have been used in a variety of hunting activities as suggested by the various environmental areas from which they have been recovered (Kehoe 1966, 1973).

Plains Side-notched (Plates 16 A, C, E, F; 17 A-D, F-H). These arrowheads have a wide distribution throughout the northern Plains. They have been found in Manitoba, Saskatchewan and Alberta, and very similar forms are reported from Montana, Wyoming, Nebraska, Kansas and North Dakota. Plains Side-notched points first appeared circa 1400 A.D. and persisted well into the Historic Period when the bow was finally replaced by the gun. The

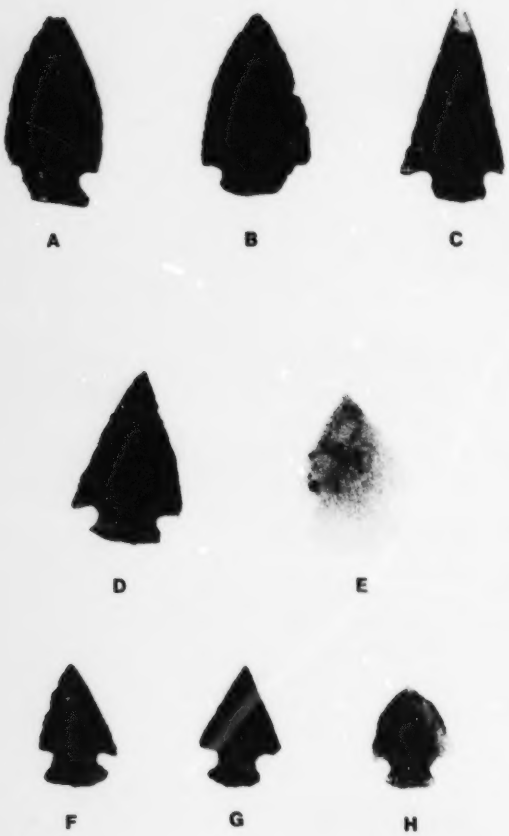

Plate 9. Pelican Lake points: H is from the Killarney area; the remainder are from the Moncur farm. (About 3/4 actual size)

Plate 10. Pelican Lake points: B is from Cherry Creek south of Boissevain; F is from the Deloraine area; the remainder are from the Moncur farm. (About 3/4 actual size)

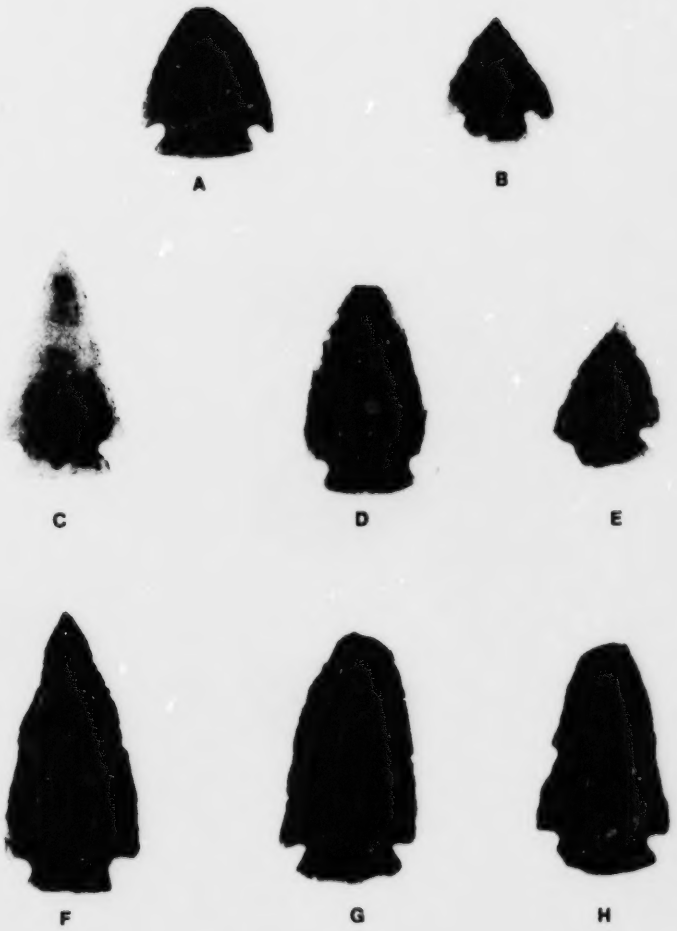

Plate 11. Pelican Lake points: B and E are from the Deloraine area; the remainder are from the Moncur farm. (About 3/4 actual size)

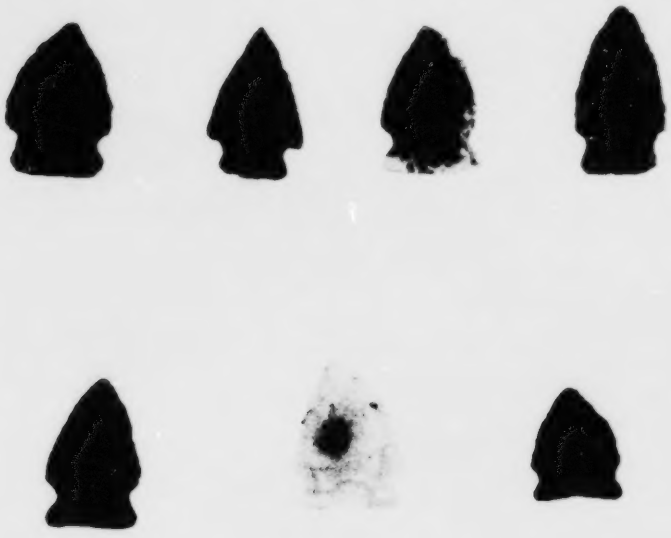

Plate 12. Besant points from the Moncur farm.
(About 2/3 actual size)

Plate 13. Besant points: A, B are from the Moncur farm; C is from the Dand farm due south of Dand; D is from the Goodlands area. (About 3/4 actual size)

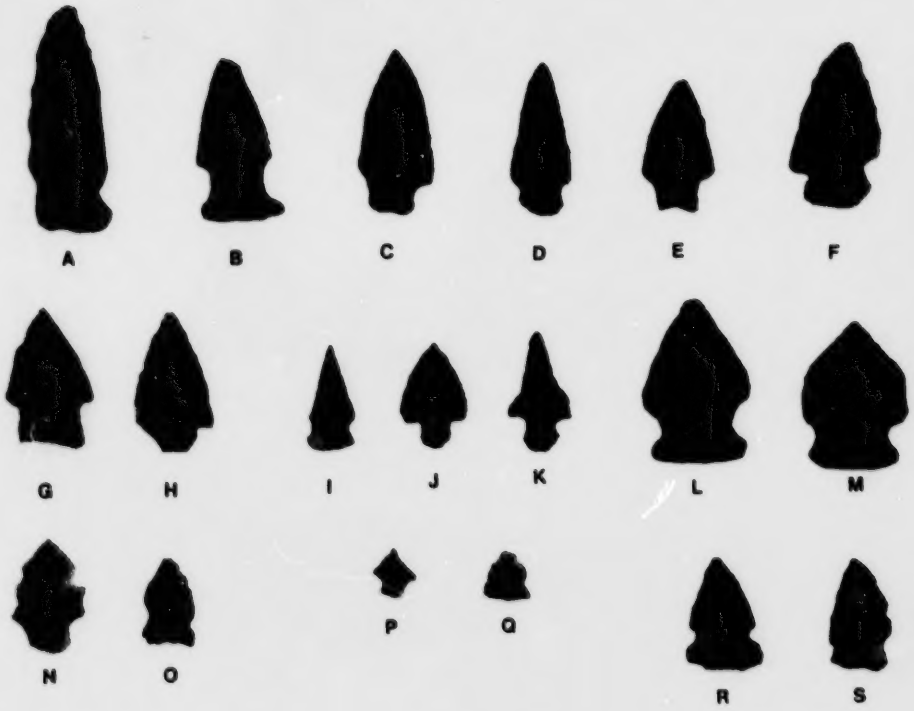

Plate 14. Sonota-like point (A) from the Mountainside area; B -- Sonota-like point from the Deloraine area; C-H -- Sonota-like points from the Moncur farm; I-S -- unknown forms; L-N -- from Killarney area, others from the Moncur farm. (About 3/4 actual size)

Plate 15. Avonlea points from the Moncur farm just north of Boissevain. (About 3/4 actual size)

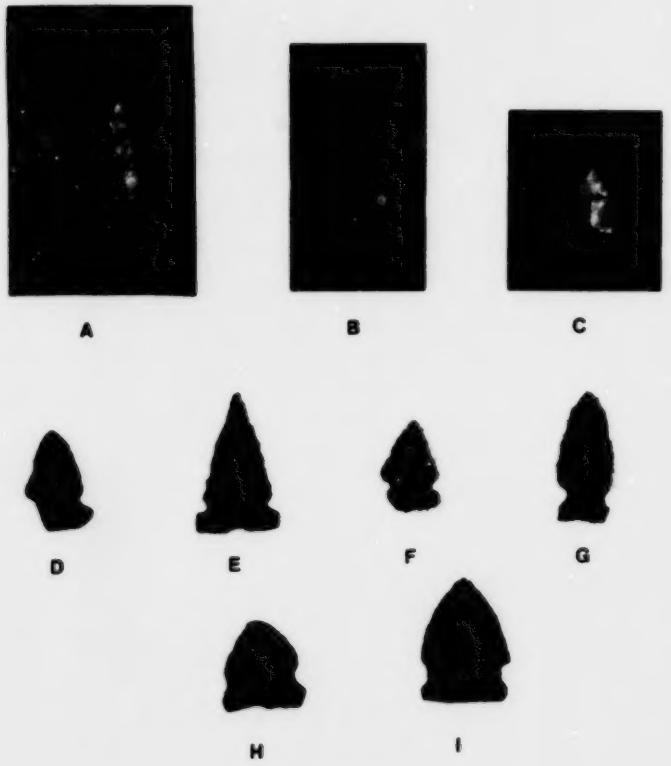

Plate 16. Plains Side-notched points (A, C, E, F) from the Moncur farm; others are Prairie Side-notched points, also from the Moncur farm. (About 3/4 actual size)

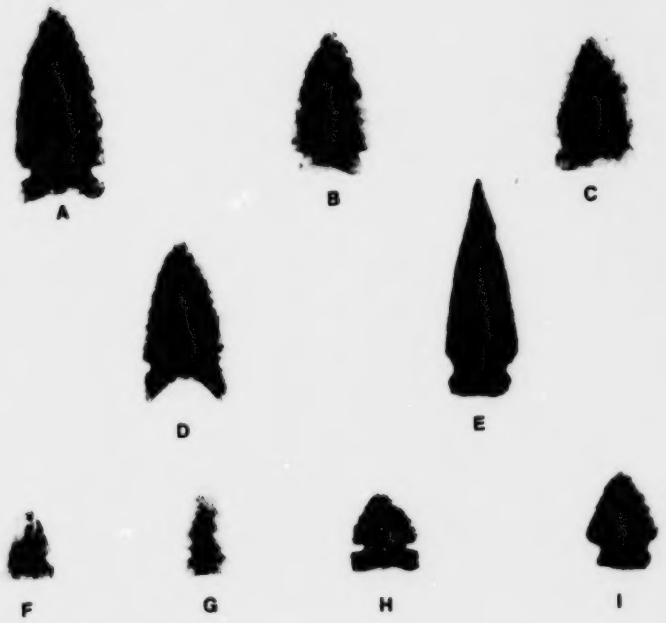

Plate 17. Plains Side-notched points (A-C) from the Moncur farm; D — Plains Side-notched point from the Killarney area; E -- unidentified, from the Desford area; F-H — Plains Side-notched points from the Moncur farm; I — Prairie Side-notched variety point from the Moncur farm. (About 1/2 actual size)

use of these arrowpoints was not restricted to nomadic hunters, as specimens have been reported from a settled village site in North Dakota (Kehoe 1966, 1973). Un-notched variants are referred to as Plains Triangular (Plate 18 A-D).

Scrapers (Plates 22-24). These tools were used for such purposes as scraping animal hides (Fig. 18) or descaling fish. They are common in all prehistoric periods and we are unable to assign specific dates to individual specimens. There are two basic kinds -- endscrapers and sidescrapers. Endscrapers (Plates 22, 23) have been shaped so that a steep angle of 45° or more is found on one end of the tool. In the photographs, this "business angle" is on the lower ends of the specimens. The endscrapers in Plate 23 would have been hafted to the end of a stick, or bone such as a deer rib. The larger specimens in Plate 23 were probably hand-held. Plate 24 illustrates four sidescrapers. On these tools, flaking occurs along the sides, usually forming an angle of less than 45°. They were probably hand-held.

Bifaces (Plates 25-33). Bifaces were usually used as knives for cutting. They are called "bifaces" simply because both faces of the tools have been flaked to give them form and sharp cutting edges. As is the case with scrapers, they occur in all time periods and hence can not be dated on the basis of form alone. As the illustrated specimens demonstrate, they come in a variety of sizes. Metaphorically speaking, these tool sizes represent everything from jackknives to cleavers. In Plate 29, the specimen on the right possesses many of the attributes characteristic of Snyders Corner-notched projectile points; the specimen on the left possesses many of the attributes characteristic of Steuben stemmed points (Montet-White 1968:72, 79). These point types are classified as Middle Woodland Illinois Hopewell (ibid:179).[2] Very large specimens like those in Plates 31-33 could have been used to skin and butcher bison. Bifaces were either hand-held or hafted. Specimens were intentionally shaped so that a handle could be attached to their bases.

Drills (Plate 34). Drills in the forms illustrated here have been produced for at least 7000 years, although in this part of the country they are probably less than 5000 years old. They are more common in Ontario than in Manitoba. Illustrated specimens C and D are particularly fine examples of superb craftsmanship.

Shell Gorget (Plates 35, 36). This is the outer whorl of a large marine snail from the Gulf Coast area of the United States. It has been ground smooth and punched with two small holes. This is clear evidence that prehistoric trade networks or group migration or both extended from the Gulf Coast to as far north as Manitoba. Similar specimens have been found in southern Manitoba and North Dakota. Syms (1979) has identified these as part of the Devils Lake - Sourisford Complex

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2 Editor's note.

Plate 18. Plains Triangular points (A-D) from the Moncur farm; E -- a piece of obsidian from the Moncur farm; F -- a metal projectile point from the Minto area; G -- gunflint from the Moncur farm. (About 3/4 actual size)

Plate 19. The chert materials and forms of these projectile points are not known locally. A and B are from the Moncur farm; C is from the Killarney area and D-F are from the Deloraine-Goodlands area. (About 4/5 actual size)

Plate 20. The chert materials these points are made from are not found locally. Specimens A and D are unknown forms. A is from the Killarney-Lena area; B is a Sonota-like point from the Moncur farm; C is a Snider-like point from the Minto area; D is from just west of Max Lake; E is a side-notched point from the Killarney area. (About 3/4 actual size)

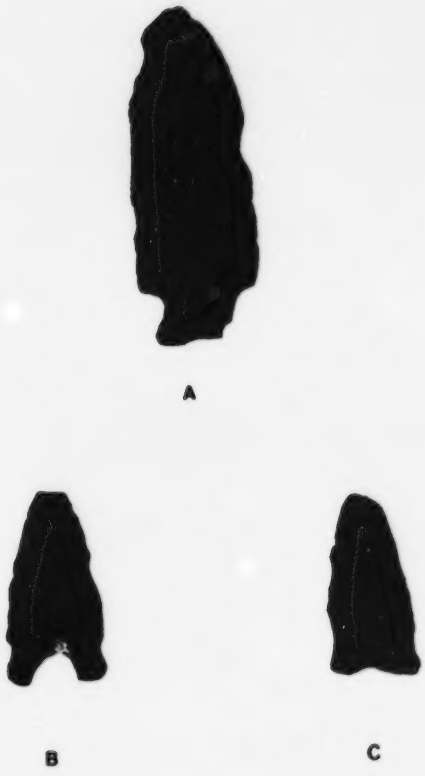

Plate 21. These points are all made from the same grey chert. They were turned up together in a ploughed field on the Moncur farm, all within a 30 centimetre radius. A is a Sonota-like point; B is an Oxbow point; C is unidentified. (About 3/4 actual size)

Plate 22. Endscrapers from the Moncur farm. Dashed lines indicate working edge. (About 3/4 actual size)

Plate 23. Endscrapers from the Moncur farm. Dashed lines indicate working edge. (About 2/3 actual size)

Plate 24. Sidescrapers from the Moncur farm. (About 3/4 actual size)

Plate 25. Bifaces: A-C were found on Cherry Creek south of Boissevain; D and E came from the Moncur farm. (About 3/4 actual size)

Plate 26. Bifaces: A -- Whitewater area; B -- Mountainside area; C and D -- Boissevain area. (About 3/4 actual size)

Plate 27. Bifaces: A-C, E-F -- Boissevain area; D -- Carrington district; G -- Lauder area. (About 3/4 actual size)

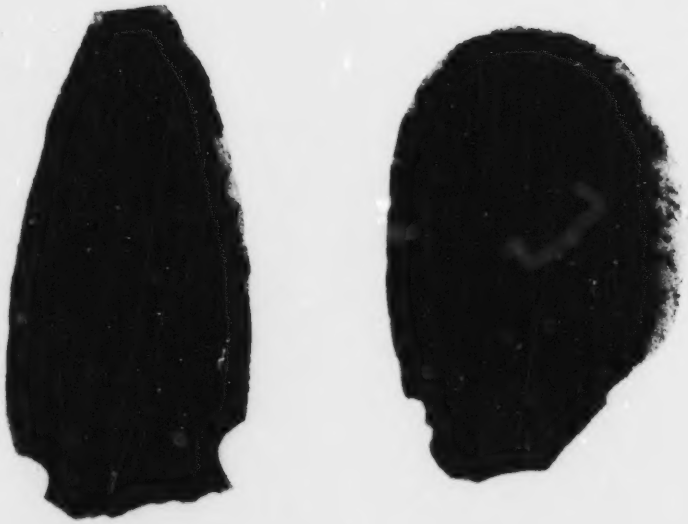

Plate 28. Bifaces: A -- Wakopa area; B -- Boissevain area. (About actual size)

Plate 29. Bifaces: both specimens from the Elgin area; the example on the left is from the Code farm. These specimens possess many of the characteristics of Steuben stemmed points (L) and Snyders corner-notched points (R). (About actual size)

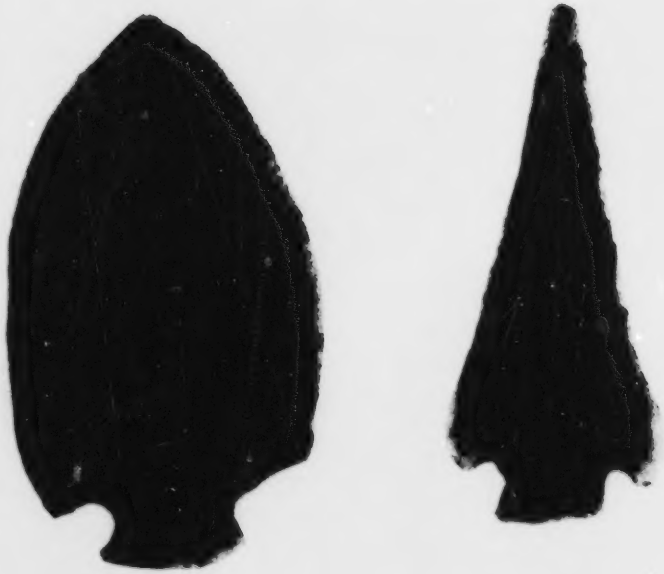

Plate 30. Bifaces: both specimens from the Mountainside area. (About 4/5 actual size)

Plate 31. Bifaces: top specimen is from the Waskada area, bottom one is from the Mountainside area. (About 3/4 actual size)

Plate 32. Biface from the Desford area. (About 3/4 actual size)

Plate 33. Biface from the Mountainside area. (About 4/5 actual size)

Plate 34. Drills: A and D are from Cherry Creek south of Boissevain; B is from the Napinka area: C is from the Killarney area. (About 4/5 actual size)

Plate 35. Shell gorget (exterior view) from the Forster farm, Killarney area. (About 3/4 actual size)

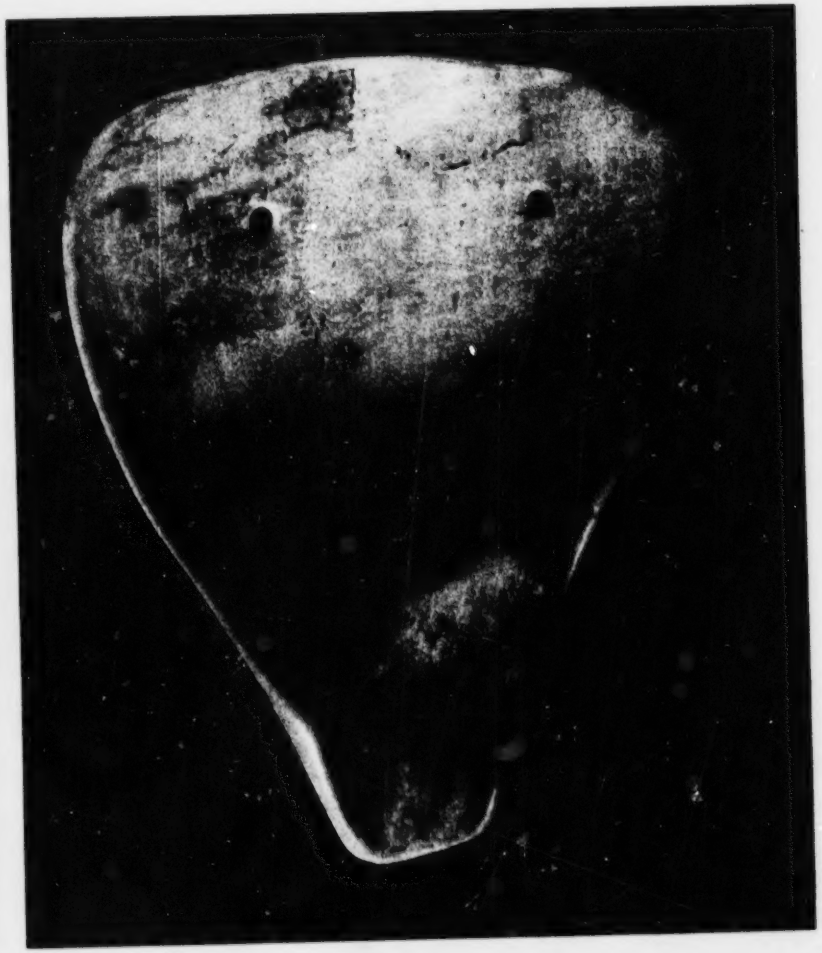

Plate 36. Shell gorget (interior view). (About 4/5 actual size)

that persisted from 900 A.D. to 1400 A.D. in Manitoba and North Dakota. The gorget may have been suspended on a cord and tied around the owner's neck. It was perhaps and indication of special status.

Horn Ladle (Plate 37). The age of this ladle has not been determined. It most likely dates from the Historic Period. Whether manufactured from domestic cow or bison horn is unknown, although the latter is very possible. It is probable that similar objects were manufactured in prehistoric times as well.

Elliptical Perforated Stone Object (Plates 38, 39). The age and function of this unique stone object is unknown, and I am not aware of any similar specimens. The object is about one centimetre in thickness, and the central hole and groove at the base have been artificially produced. Had it been found in a lakeside environment, we could speculate that it was used as some sort of fishing gear. Based on where it was found, however, the only feasible suggestion has been that it was some kind of toggle.

Tubular Stone Object (Plates 40-43 and Figures 4, 5). Both the age and function of this unique object are unknown. The only other object similar to it occurs in a collection from the Neepawa area (L. Syms, personal communication). The Neepawa specimen is shorter, more oval in shape and bears no symbols. Its centre, however, has been gouged out in a similar fashion to the specimen illustrated here.

It has been suggested that this is a pipe bowl; however, its size and the absence of carbon in the interior do not support this identification. Other suggestions have been that it is an atlatl weight or the central cooling chamber of a pipe stem. Neither of these suggestions is convincing, yet more credible interpretations are lacking. The symbols carved on this steatite, also known as soapstone, object are without equals in archaeological literature.

Prehistory of the Turtle Mountain District

The following is a brief overview or outline of prehistory in the Turtle Mountain region. Thus far, we have been talking about archaeologists, environments and artifacts. Now, with the aid of an artist, we will have a look at the prehistoric people themselves and their lifestyles. When viewing the pictures, take your thinking cap off and let your imagination take over. Do not just look at these pictures -- experience them. Add colour, sound and movement. Place yourself in the scene as you travel into the remote depths of time. But do not hurry; enjoy your new surroundings, and pause to marvel at the skills and abilities of those around you.

All of this really did happen long, long ago, and not too very far away.

The projectile point types referred to below are illustrated in the foregoing section. Much of what follows, except where otherwise stated, has been adapted from Syms (1980).

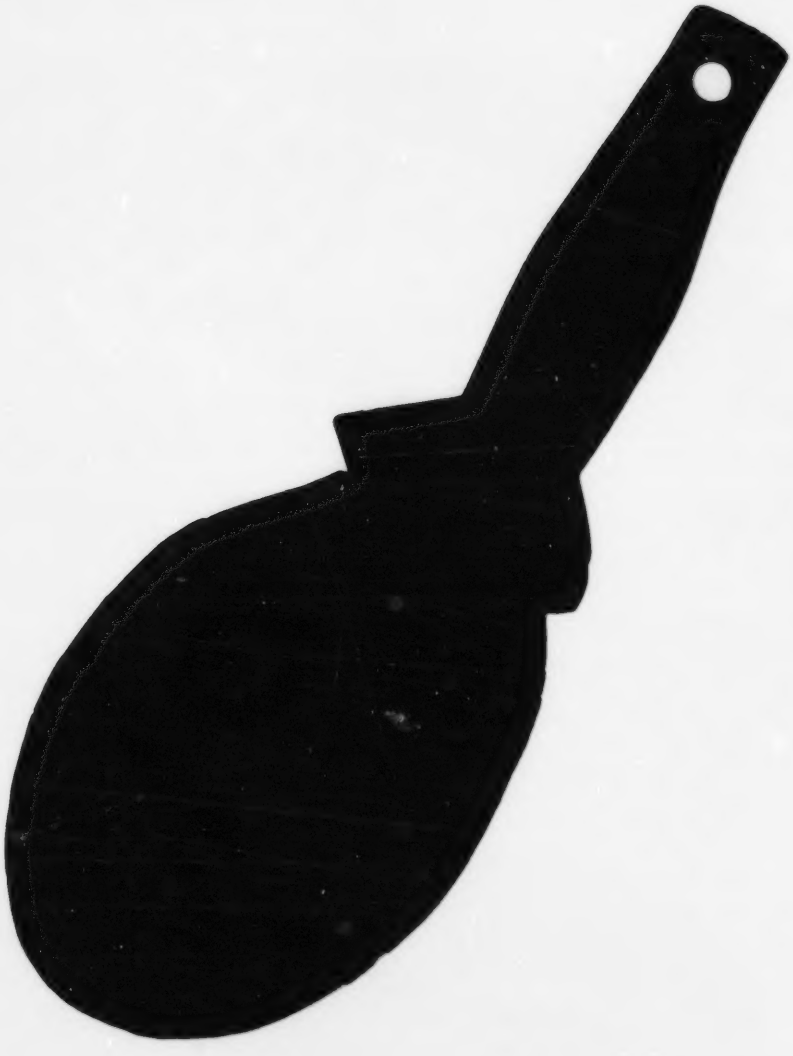

Plate 37. Horn ladle, from the Mountainside area. (About 2/3 actual size)

Plate 38. Elliptical perforated stone object, found just east of Wakopa. (Actual size)

Plate 39. Elliptical perforated stone object, reverse view. (Actual size)

Plate 40. Tubular stone object from the Rankin farm, Killarney area, side view. (Actual size)

Plate 41. Tubular stone object, front view. (About 4/5 actual size)

Plate 42. Tubular stone object, reverse side view. (About actual size)

Plate 43. Tubular stone object, top view. (About actual size)

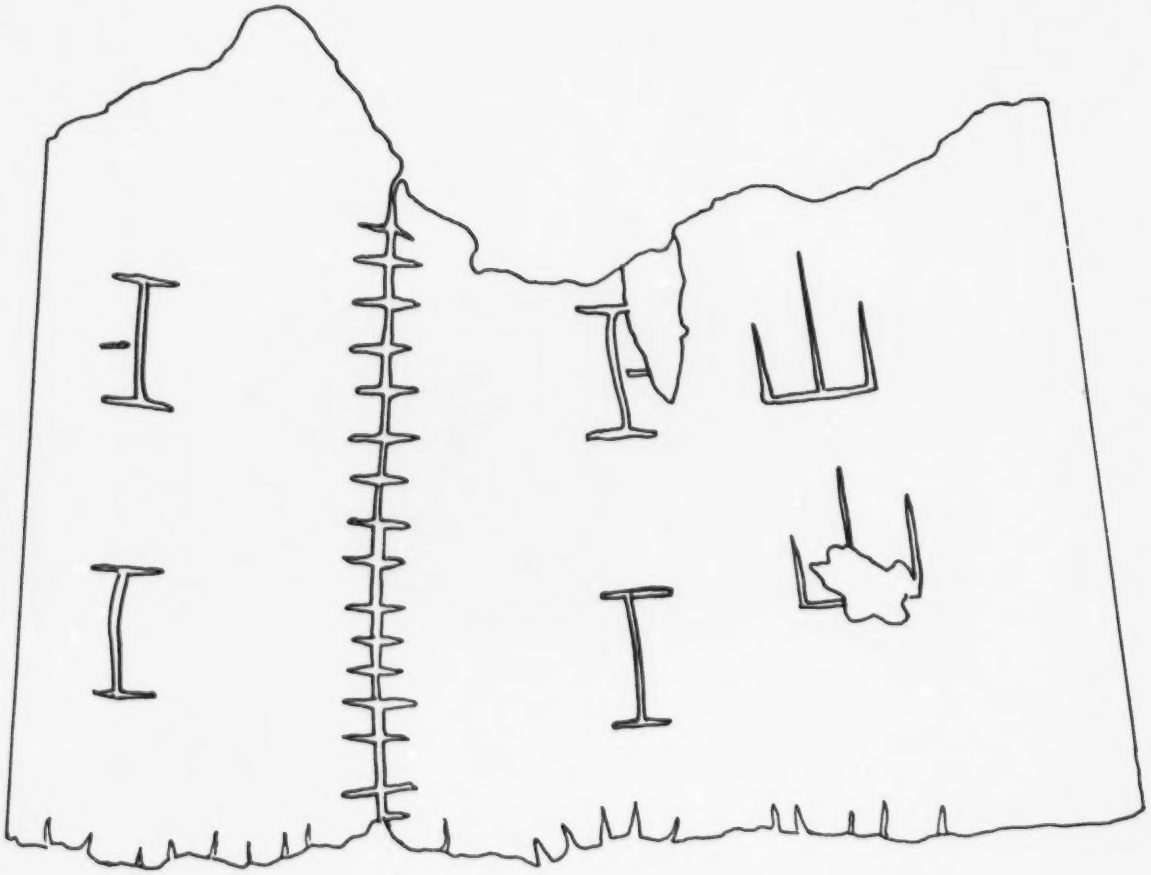

Fig. 4. "Exploded" view of the tubular stone object from Killarney area.

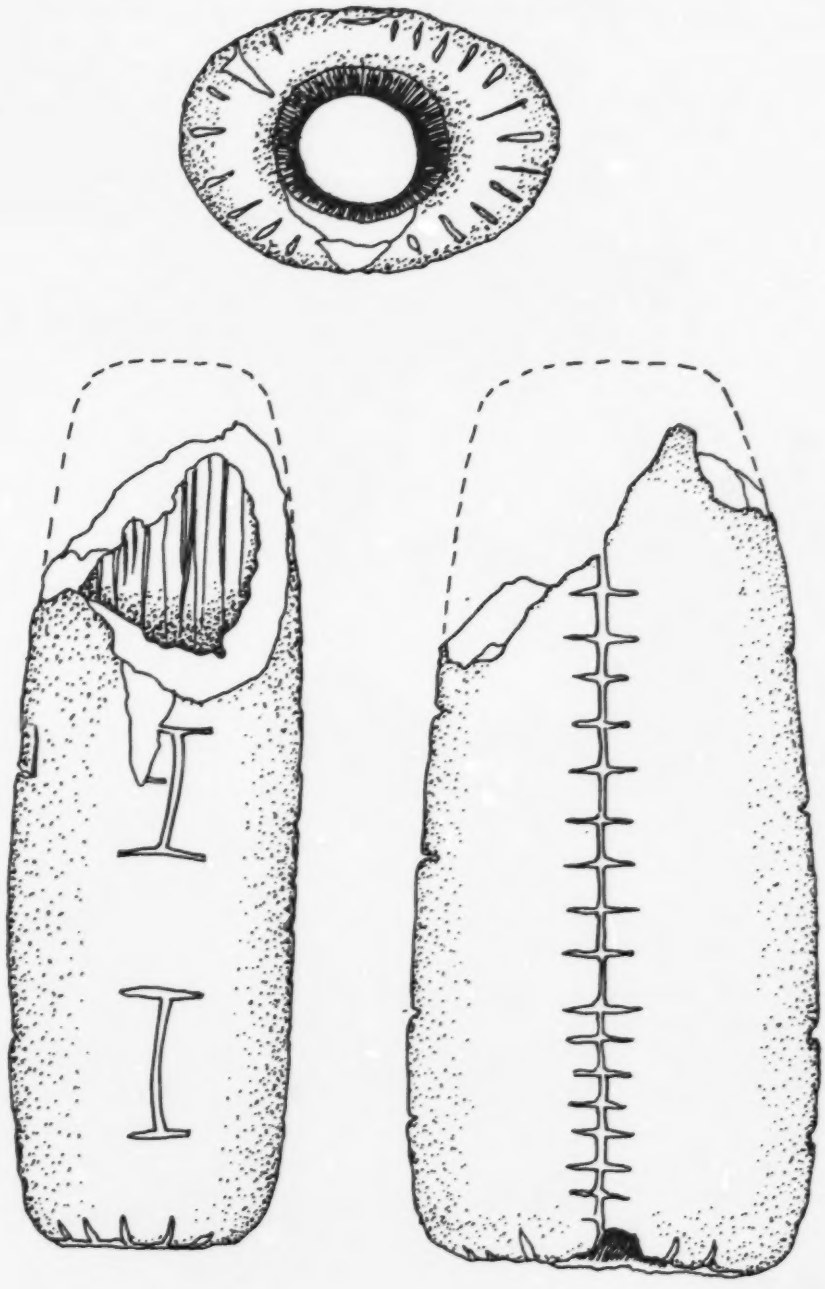

Fig. 5. Artist's representations of various views of the tubular stone object from Killarney area.

Before the Glacier

Current evidence suggests that the first people to arrive in North America came across the Bering Strait from Siberia at least 40,000 years ago and possibly much earlier. Initially, they settled in what is now Alaska and the Yukon Territory, but as their numbers increased they spread out to populate all of North and South America. These people were the ancestors of today's Native Indian population. We do not know if these first colonizers inhabited southwestern Manitoba, because a great glacier covered Canada and the northern United States between 21,000 B.C. and 14,000 B.C. This massive block of ice, hundreds of metres thick, transported millions of tons of earth from the east and north and dumped it on the southern portions of Manitoba. In this way, hills were levelled, river channels were filled in and the landscape was greatly changed. Any evidence of the first inhabitants is probably destroyed or buried.

The Early Prehistoric or Palaeo-Indian Period

Although most of the written record in southwestern Manitoba deals with the last 150 years, the record of human occupation extends back some 12,000 years. The Turtle Mountain region was the first area of our province to emerge from beneath the great ice sheets of the last glaciation. During the early times, a spruce forest covered the land. At the same time, just to the north and east, waves pounded the beaches of Glacial Lake Agassiz, whose northern boundary was formed by the retreating glacier. The mighty mastodons -- giant elephants of a long-vanished era -- the ice-age moose and, perhaps, the woodland caribou wandered over this early landscape of grey icy waters and silent, mist-shrouded forests. They came seeking food from the newly reclaimed land, as did the next arrivals -- human beings.

The earliest evidence we have of people's presence in southwestern Manitoba comes from a few isolated finds of "Clovis" spear points (Fig. 6). This style of point dates from approximately 9500 B.C. to 9000 B.C. Two points of the Clovis type have been found in the Brookdale-Mentmore district, a third near Erickson, and a fourth specimen was recovered in the Manitou area (Pettipas 1976b). Although Clovis points have not yet been found in the Turtle Mountain region, we can assume that Clovis people passed through the area (Fig. 7). They probably arrived, on a seasonal basis, in independent groups of one or two families. These small groups would have frequently moved, until success in the hunt allowed them to settle for a week or two. The arrival of these groups would have been sporadic and their length of stay short, both factors being dependent upon the relative scarcity of game here and elsewhere. The Clovis peoples, then, while being the first to arrive, seem to have been transitory and temporary occupants of southwestern Manitoba.

Between 9000 B.C. and 8000 B.C., a people whom we refer to as "Lindenmeier" moved across the southwestern landscape (Fig. 8). Their presence is again marked by

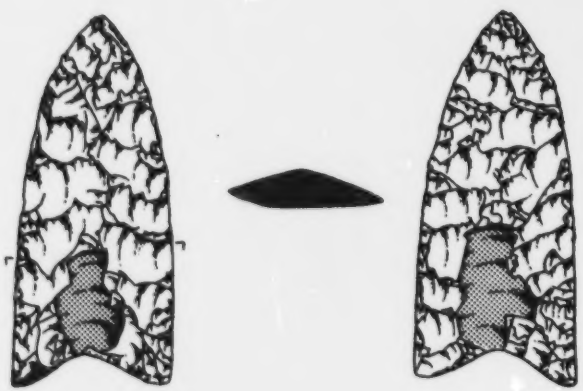

Fig. 6 A Clovis point from the Carberry Plains, situated to the northeast of the Turtle Mountain region. The shaded areas highlight grooves created in the specimen to thin it, presumably to facilitate hafting. The "hooks" located on the sides of the left diagram indicate extent of smoothing of the edges so that the bindings that secured the point to the end of the shaft would not be cut. Although no Clovis points have yet been found in the Turtle Mountain district, it can be concluded on logical grounds that Clovis peoples passed through the area -- see Fig. 7.

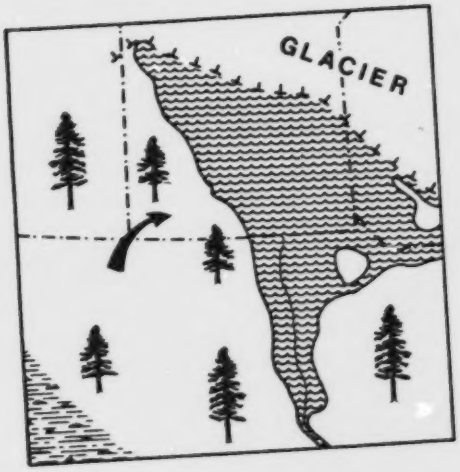

Fig. 7 The Clovis people entered southwestern Manitoba from the south and/or west at a time when most of the province was still buried beneath the ice sheet, flooded by Lake Agassiz, or covered by a spruce-dominated forest.

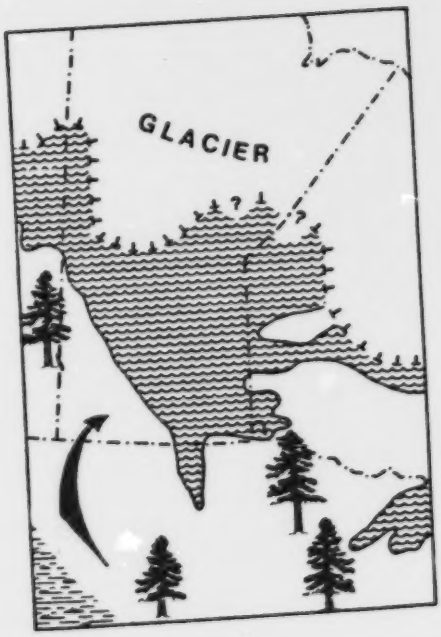

Fig. 8 When Lindenmeier peoples first entered Manitoba, the natural environment was probably still much as it was during Clovis times. Two of the six examples of Folsom points recorded in Manitoba to date were found in the Turtle Mountain district (see Plate 1).

their distinctive styles of spear points, called "Folsom" and "Midland" points (Midland points are considered to be "unfluted" Folsom points. That is, they do not have channel-shaped flake scars). These points are more common than Clovis but are still relatively rare. They have been found near Treherne, Melita, Souris and Boissevain (Plate 1), and one specimen is reported from farther north near Benito in the Swan River Valley. During Lindenmeier times, much of southern Manitoba was still covered by Lake Agassiz, but the forested area in the Turtle Mountain region shifted to grass and parkland vegetation. We can assume that animal populations increased and that a large, now-extinct species of bison became fairly numerous on this new landscape (Pettipas 1970:16). We cannot say whether the Lindenmeier people travelled in larger groups or if their occupation of southwestern Manitoba was longer than that of their Clovis predecessors. Evidence from New Mexico indicates that bands of Lindenmeier peoples periodically came together in large groups for communal bison drives. Because our Lindenmeier "finds" in Manitoba consist of a few isolated projectile points, we can only infer that such activities could have occurred here also. If this was the case, the supportive evidence will most likely be found on the Goodlands and Boissevain Plains immediately to the north of Turtle Mountain.

For the latter part of the Palaeo-Indian period — from about 8000 B.C. — we have comparatively more evidence in the form of more numerous and diversified types of projectile points. Artifacts from this latter phase are collectively referred to as "Plano" and include several forms of points. These have been found throughout southern Manitoba and at least as far north as The Porcupine Hills. Projectile point types from the Plano period include Plainview (Plate 3 A, B), Hell Gap, and Agate Basin (Fig. 10; Plates 4, 5) which are lanceolate, or leaf-shaped, in form. Points such as Alberta, Eden and Scottsbluff (Fig. 9; Plates 2, 3 C-E, are shouldered and stemmed. Most of these point types have been found in the Turtle Mountain region. We would be on shaky ground to suggest that these various point styles belonged to different "tribes", yet some form of cultural differentiation is likely being represented. This is certainly a very different situation from the first 2000 years, when only two point types, Clovis and Folsom, that followed each other in time, have been found. If the current evidence does not allow us to infer larger social groupings during the latter phase of the Palaeo-Indian Period, we can suggest that groups were relatively more numerous and were probably permanent occupants. Over the long run, the climate may have alternated between current-type conditions and those similar to the 1930s. With the retreat of Lake Agassiz and the glaciers, vast new tracts of land became available and Manitoba may have experienced its first real population influx during early Plano times (Fig. 9). As animal populations spread over a much larger area, so too did early people. While these first residents continued to hunt big game such as bison (Fig. 11), the

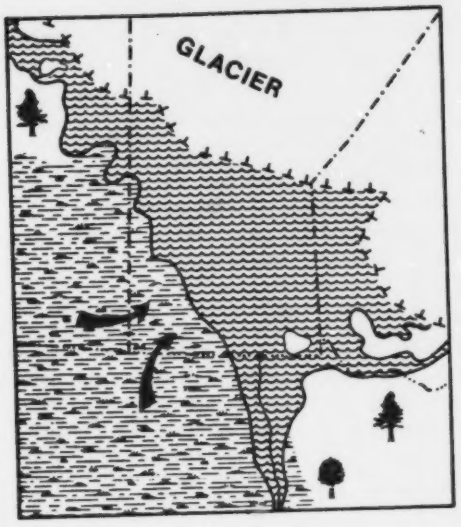

Fig. 9 Manitoba's first influx of long-term residents may have taken place 10,000 years ago, or ca. 8000 B.C., when the spruce-dominated forest west of Lake Agassiz gave way to grassland. The people involved were probably makers of Scottsbluff, Alberta and Eden points, several of which are to be found in the Moncur collection (Plates 2, 3 C-E).

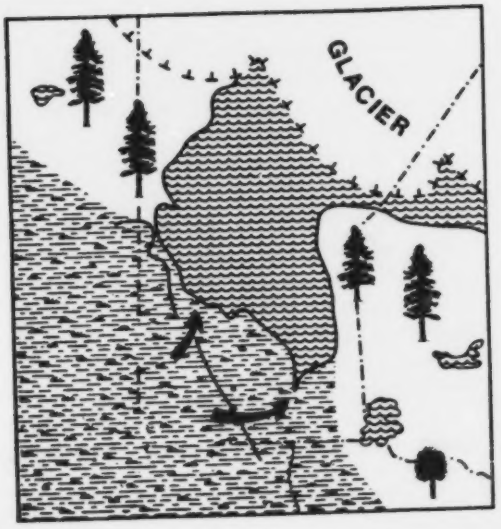

Fig. 10 As Lake Agassiz diminished in the southern portion of its basin, Palaeo-Indian people moved onto the ancient lake bed from the country west of the Manitoba Escarpment. These people were makers of Agate Basin points (Plates 4, 5).

Fig. 11 With the disappearance of the spruce-dominated forest and its replacement with grassland, the Turtle Mountain district became the home of large numbers of the now extinct big-horned bison. The above scene was no doubt a common one by 8000 B.C.

new variety of land forms also allowed the exploitation of a greater diversity of food resources.

Before we leave the topic of Palaeo-Indians, we should say a few words about the stone tool technology that was so essential to the lifestyle, not only of the Palaeo-Indians themselves but to all of the prehistoric peoples of southwestern Manitoba:

> In manufacturing his stone tools, the Palaeo-Indian employed a number of procedures. By far, the bulk of the stone tool inventory was produced by stone flaking or chipping, as opposed to grinding or polishing. There were two basic kinds of stone chipping -- percussion and pressure.
>
> Percussion involved striking a piece of stone (the "objective" piece) with a hammer of some sort (Fig. 12A), or else throwing the objective piece against an anvil stone. Sometimes the material to be shattered was placed on an anvil stone and struck from above with a hammerstone (Fig. 12B). All of these methods are referred to as "direct percussion." An alternate procedure was "indirect percussion." Here, the tip of an antler or bone punch was placed on the part of the objective piece to be flaked, while the opposite end of the punch was struck with a hammerstone. The force of the blow was conveyed through the punch to the point on the objective piece from which a flake was to be removed.
>
> Some artifacts, notably projectile points, were initially "roughed out" by the percussion method and then thinned and finished through the use of pressure flaking. Pressure flaking involves the removal of flakes by pressing a pointed piece of antler against the edge of the objective piece. Two methods of pressure flaking are recognized: "free-hand" (Fig. 12C) and the "punch" technique (Fig. 12D). The punch technique appears to have been used in the fluting of Clovis and Folsom points, and in the production of "prismatic blades" -- elongated, parallel-sided flakes (Plate 24, bottom) from which a variety of tools was manufactured (Pettipas 1975:14, 16).

The Middle Prehistoric Period

Looking at North America as a whole, the Middle Prehistoric Period -- also called the Archaic Period in many areas -- was a time of notable population growth and regional cultural differentiation. Technological specializations

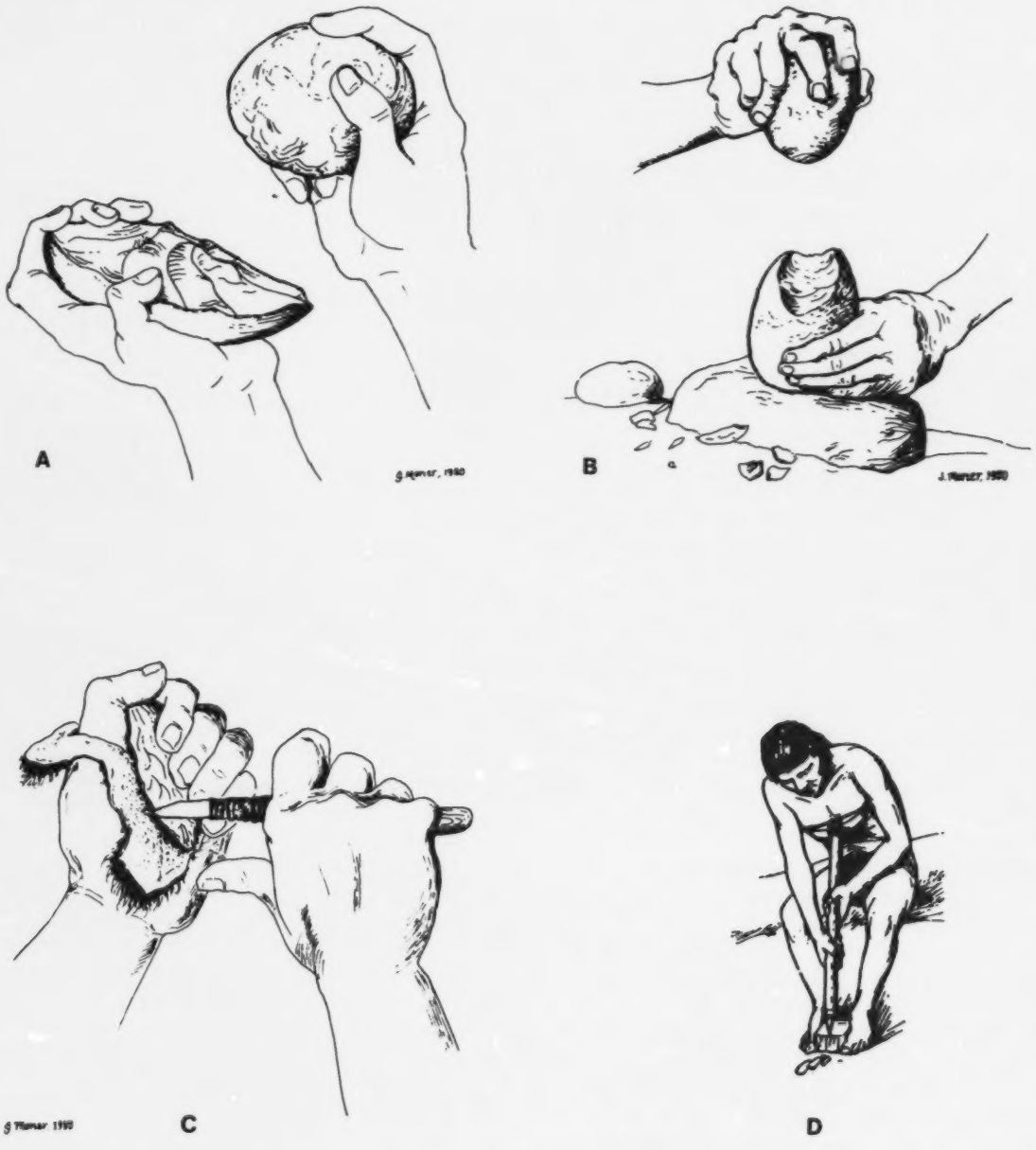

Fig. 12 Methods of prehistoric stone tool manufacture: A — direct percussion using a cobble as a hammerstone; B -- direct percussion using an anvil stone; C — free-hand pressure flaking with the use of an antler flaker; D -- pressure flaking using the "chest-punch" technique.

expressed in various regional styles appear as woodworking tools such as axes and adzes, fishing gear such as fish hooks, fish traps and net sinkers, and smoothed stones, called "manos" and "metates", for grinding seeds. Other ground and polished stone tools also began to appear. The people living around Lakes Michigan and Superior learned to process raw copper and manufactured a variety of tools from it. Of course, not all of these achievements affected the people in southwestern Manitoba, but they do illustrate the general changes in lifestyles that characterized the Middle Prehistoric Period as a whole.

The new population densities resulted in groups splitting up and inhabiting new territories. Eventually, these groups developed their own dialects, customs, and artifact styles. Social organization, particularly toward the end of the period, was probably not much different, in general, from that of the people who inhabited southwestern Manitoba when the Europeans arrived. For much of the year, the people lived in bands, composed of related families, numbering perhaps 40 to 80 individuals. During times of food scarcity, the bands probably broke up into smaller units of one or two families. At other times, when food resources were especially abundant, several bands might have come together to form a larger unit. The larger gathering went hand in hand with communal bison hunts, religious ceremonies, visiting and the opportunity for the younger members to make new friends and meet potential marriage partners.

The Middle Prehistoric Period is dated from approximately 5500 B.C. to about the time of Christ. During the earlier part of it, the climate was hotter and drier, perhaps approaching drought conditions on the High Plains. As we have previously noted though, southern Manitoba was probable not as severely affected by the drought. Even so, we have far less evidence from this earlier part of the Middle Prehistoric than the later part, when conditions were much as they are today. A few large side-notched projectile points are the only evidence we have. The severe conditions had lessened, if not entirely abated, by 3500 B.C., and the human population appears to have undergone a sizeable increase.

There are several projectile point types associated with the Middle Prehistoric Period such as Oxbow and McKean (Plates 6, 7 D, E) followed, in time, by Duncan (Plate 7 A) and Hanna points (Plate 8 A-C). A type known as Pelican Lake (Plate 9) represents the late or terminal segment of this time period. All of these projectile points were used on light spears or darts, propelled with atlatls (Fig. 13), because the bow and arrow had not yet been introduced. Although all of these point types have been found in the Turtle Mountain region, Pelican Lake points are particularly numerous, reflecting perhaps a growing population through time.

We know from archaeological sites that the people exploited a wide range of animal species and environments during the Middle Prehistoric Period. In the Plains area, they had long since

Fig. 13 The atlatl -- the primary weapon system until the introduction of the bow and arrow during the early Christian era.

developed the bison jump (Fig. 14) and relied heavily on the great herds for meat and hides. From Palaeo-Indian times until the Historic Period, the vast hordes of bison that passed through the area were the main attraction to the Turtle Mountain region. The herds moved in a fairly regular seasonal round; that is, they grazed on the grasslands during the summer and shifted to the shelter of valleys, wooded uplands and the Aspen Parkland for the winter months (Arthur 1975:53-60). The movement of prehistoric people was very much tied to these movements of the herds. In 1858, Henry Hind observed that:

> The ranges of the buffalo in the north-western prairies are still maintained with great exactness, and old hunters, if the plains have not been burnt, can generally tell the direction in which herds will be found at certain seasons of the year. ...
>
> Red River hunters recognize two grand divisions of buffalo, those of the Grand Coteau and Red River, and those of the Saskatchewan. ... The north-western buffalo ranges are as follows. The bands belonging to the Red River Range winter on the Little Souris, and south-easterly towards and beyond Devil's Lake, and thence on to Red River and the Shayenne. Here, too, they are found in the spring. Their course then lies west towards the Grand Coteau de Missouri, until the month of June, when they turn north, and revisit the Little Souris from the west, winding round the west flank of Turtle Mountain to Devil's Lake, and by the main river (Red River), to the Shayenne again. In the memory of many Red River hunters, the buffalo were accustomed to visit the prairies of the Assiniboine as far north as Lake Manitobah, where in fact their skulls and bones are now to be seen; their skulls are also seen on the east side of the Red River of the north, in Minnesota, but the living animal is very rarely to be met with. A few years ago they were accustomed to pass on the east side of Turtle Mountain through the Blue Hills of the Souris, but of late years their wanderings in this direction have ceased; experience teaching them that their enemies, the half-breeds, have approached too near their haunts in that direction. ...
>
> The great western herds winter between the south and the north branches of the Saskatchewan, south of the Touchwood Hills, and beyond the

Fig. 14. The use of the "bison run" was a long-standing tradition on the prehistoric High Plains. "Bone beds" left behind by such activity still await discovery in the Turtle Mountain district.

> north Saskatchewan in the valley of the Athabaska; they cross the South Branch in June and July, visit the prairies on the south side of the Touchwood Hill range, and cross the Qu'appelle valley anywhere between the Elbow of the South Branch and a few miles west of Fort Ellice on the Assiniboine. They then strike for the Grand Coteau de Missouri, and their eastern flank often approaches the Red River herds coming north from the Grand Coteau. They then proceed across the Missouri up the Yellow Stone, and return to the Saskatchewan and Athabaska as winter approaches, by the flanks of the Rocky Mountains. We saw many small herds, belonging to the western bands, cross the Qu'appelle valley, and proceed in single file towards the Grand Coteau in July 1858. The eastern bands, which we had expected to find on the Little Souris, were on the main river (Red River is so termed by the half-breeds hunting in this quarter). They had proceeded early thither, far to the south of their usual track, in consequence of the devastating fires which swept the plains from the Rocky Mountains to Red River in the autumn of 1857. We met bulls all moving south, when approaching Fort Ellice; they had come from their winter quarters near the Touchwood Hill range. As a general rule the Saskatchewan bands of buffalo go north during the autumn, and south during the summer. The Little Souris and main river bands, go north-west in summer and south-east in autumn. It is almost needless to remark again that fires interfere with this systematic migration, but there are no other impediments which will divert the buffalo from their course. The half-breeds state that no slaughter by large parties of hunters or Indians can turn large herds from the general direction they have taken when on the march; want of food is alone able to make them deviate from the course they have taken (Hind 1971:II:107-108, emphasis added).

We can see by Hind's account that although the migration routes of the bison were generally consistent, a number of temporary factors could disrupt the pattern. Dr. Anthony Buchner, citing Roe (1951), has noted other disruptive factors and their consequences:

> Bison would avoid areas which had recently burned over or which had

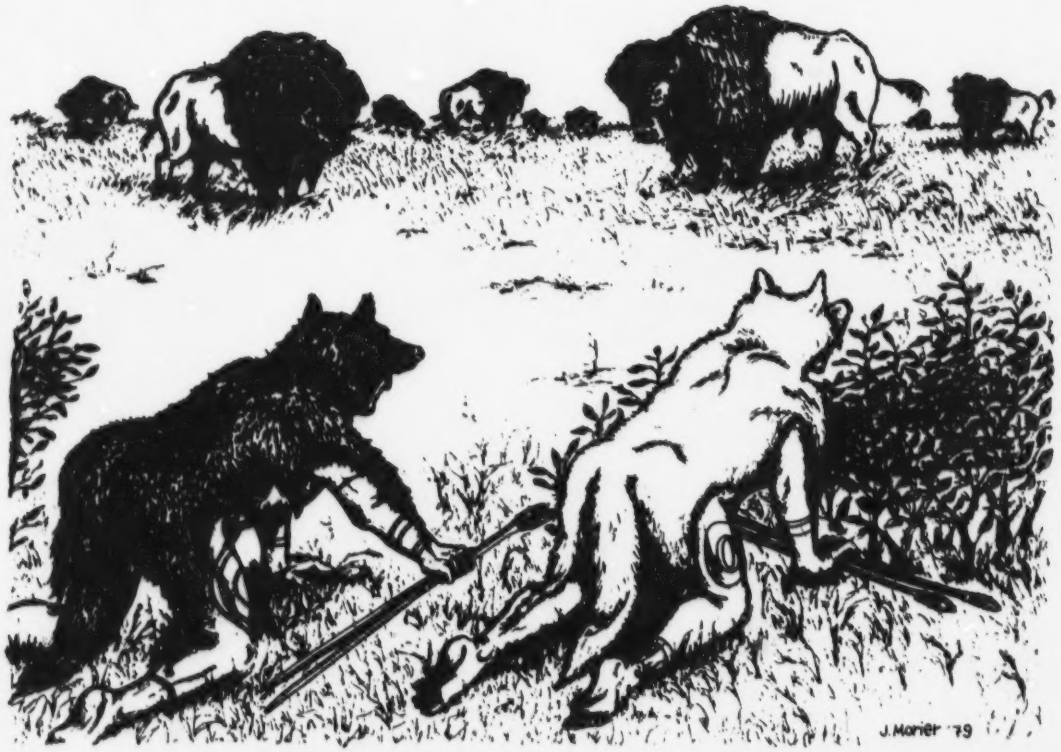

Fig. 15 Bison hunting took a variety of forms among prehistoric Manitobans, including, perhaps, disguises and mimicry.

been infested with locusts. Both of these events are concomitants of extended hot, dry periods. In winter, heavily crusted snow after a sudden thaw-freeze would impede their movements. Extreme cold would have little effect on them but, when associated with strong winds, bison would be forced into wooded areas, even if no food was available there. In years which witnessed a sudden dense snowfall, bison would be prevented from reaching the forest margins by the depth of the snow. In an extremely mild winter, on the other hand, bison could winter in the river valleys in the grasslands and few, if any, would arrive at the forest edge. Historically, both Whites and Native peoples moved into the usual bison wintering areas in advance of the bison and the latter's failure to arrive caused considerable hardship. If the Native peoples could not procure food from the fur traders' stores, they frequently faced starvation in these areas. Unfortunately, the fur traders were usually in a similar predicament. Some other option must have been present in prehistoric times, as "anomalous" winters in which bison were unable or unwilling to travel to the forest margins may have been fairly common (see also Moodie and Ray 1976; Wedel 1963:3), perhaps as frequently as one year in five. In some winters at least, movement back onto the plains would have been hampered by the same conditions which were responsible for the inability of the bison to reach the forests. The only viable alternative would appear to have been for Native peoples to travel deeper into the forest in search of other forms of large game. The drifting or crusting of the snow that may have occurred on the plains would not have obtained in the forest. Shelter and firewood were readily available and extremely severe winters may have actually facilitated the hunting of moose and caribou, as these animals are known to move about more, thus leaving more fresh tracks in times of extreme cold (Buchner 1979:84-85).

Given these considerations, we expect that during a "normal" year the plains around Turtle Mountain were visited, in the warmer months, by a number of tribes. These groups would have included the region into their own seasonal migrations. During the cold and windy winter months, the surrounding plains were

abandoned. One or two bands split into family units, and probably sought shelter on Turtle Mountain. On Oskar Lake we have found the remains of what might be a small winter encampment that was occupied in the 1400s (Plate 44), but this pattern of winter settlement undoubtedly extends further back into the Middle Prehistoric Period. We must bear in mind, however, that the "anomalous" winters discussed by Dr. Buchner could have periodically altered this pattern of movement and settlement.

The Late Prehistoric Period

From the time of Christ to the Historic Period, populations continued to grow and a number of technological and cultural innovations were introduced. In the Turtle Mountain region, pottery and the bow and arrow (Fig. 17) first appeared, burial mounds were constructed, bison "pounds" were built and trading contacts extended over much of North America. By this time, the ranges of a number of distinct tribal groups overlapped geographically in southwestern Manitoba (Syms 1976). These groups may have frequented the area during different seasons or occasionally joined together for the great bison hunts. Each tribal unit, however, would have maintained and expressed its own identity by such means as distinctive pottery and arrowhead styles, different clothing designs and hair styles. Social organization was, as previously discussed, based on the family-band-tribal system.

It does not appear that pottery was used as extensively in the Turtle Mountain region as it was a little farther north in the Brandon district and in the Souris-Melita area to the west (L. Syms, personal communication);[3] however, it is not entirely absent (Fig. 19). There is a variety of vessel forms but overall they have globe-shaped or oblong bodies with in-sloping mouths. The exterior body is smoothed or roughened and different decorations often appear around the neck and rim. These decorations are various patterns of incised lines or rows of circular or oblong impressions. Some decorations were made by pressing cords into the soft clay. Different pottery styles and decorations are characteristic of early, middle and late phases of the Late Prehistoric Period. In general, pottery was used for cooking and storage, although some very small pots with elaborate designs and decorations probably had religious functions.

According to Dr. J.V. Wright (1976:75),

> From the earliest times, man has traded surplus goods for objects exotic or rare in his own country. The trading patterns appear to have involved multiple hand-to-hand transactions rather than discrete trading parties roaming over vast tracts of land in search of business. Despite the immediate, local nature of most trade, it was capable of moving goods over distances of 1,000 miles.

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[3] Editor's note

Plate 44. A small archaeological assemblage of the Late Prehistoric Period excavated in the Turtle Mountains: A and C -- broken projectile point tips; B -- Plains Side-notched projectile point; D -- endscraper; E -- waste flakes probably created from the manufacture of the above tools. This assemblage is believed to represent a winter habitation in consideration of

1. location - although occurring towards the end of a peninsula, the site is removed from the shoreline and if bush cover was similar in the past it would have been well protected;
2. size - the site is quite small and would have been occupied by a group no larger than a single family unit - the minimal social unit into which bands would have split during the winter months;
3. food remains - the fragmentation of faunal material suggests that at the time of occupation maximum use had to be made of the food resources at hand;
4. lithic recoveries - the use of thin flake blanks suggests that site was occupied at a time when raw material was not readily available. This is contrasted with the presence of large rough direct percussion flakes and shatter fragments of brown chalcedony that are quite common in the general region.

The absence of pottery in a Late Prehistoric site might also be taken as an indication of winter occupation. Further, early historical sources state that such wooded upland areas were occupied from late fall through to early spring. The utilization of bird and aquatic resources, while not impossible during the winter, might favour a late fall or early spring occupation of the site.

Plate 44. (About 4/5 actual size)

Fig. 16 Before the introduction of pottery, food could be cooked by dropping heated stones into birchbark or leather containers of soup or broth.

Fig. 17 The manufacture of an arrow point through the use of pressure flaking, a technique that permitted a high degree of precision in the manufacture of chipped stone tools.

Fig. 18 The hide-working industry is one of the oldest on the Continent. The scraper depicted here was fitted with a stone bit of the sort illustrated in Plates 22 and 23.

Fig. 19 Methods of pottery-making during the Late Prehistoric Period: the coil method (left), whereby the walls of the vessel were built, and the paddle-and-anvil method (right), which welded the coils together and thinned the vessel.

The farther an object was removed from its source the rarer it became, and with scarcity came increased value. A conch shell on the Gulf of Mexico would have had relatively little local value, since the shells are abundant in the area and were easily obtained. The same shell, a thousand miles to the north, however, would have been a very rare and, therefore, valuable object. Similarly, obsidian (volcanic glass) from a source in northwestern Wyoming would acquire a much-increased value a thousand miles to the east.

The prehistoric people of southwestern Manitoba had indirect trading contacts (Fig. 20) during the Late Prehistoric Period with groups as far away as the Great Lakes, the Ohio-Illinois area, the Gulf of Mexico and the West Coast. Native copper, fashioned into small tools and ornaments, came from the Great Lakes. Large shells used for manufacturing large pendants -- similar to the one in Plates 35 and 36 from the Moncur collection -- came from the Gulf of Mexico. A variety of seashells, used for beads, came from the West Coast. Occasionally, obsidian, a black volcanic glass, was also obtained from groups to the west or south. Red pipestone, or "catlinite", was brought in from southern Minnesota. The connection with the Ohio-Illinois area may have been more of an "influence" than an actual trading contact. This influence is seen in projectile point and biface forms that are uncommon in Manitoba but abundant in the Illinois area. Some of these objects are made from a type of stone called "Burlington Chert". This chert is not native to Manitoba but is abundant in the American southeast, supporting the suggestion that the elaborate Hopewell Culture, centred in the Ohio-Illinois region from approximately 250 B.C. to 750 A.D., had extended its sphere of influence as far north as Manitoba. Based on their identical morphology and typology, Syms (personal communication) believes two specimens in Plate 29 are classic examples of Ohio-Illinois influence.[4] Interestingly enough, these rare items are thus far only known from the Turtle Mountain region in Manitoba.

From 900 A.D. to 1400 A.D., a culture known to archaeologists as the Devils Lake-Sourisford held sway on the grasslands of southwestern Manitoba. Included within the repertoire of this culture were large earthen burial mounds and grades up to 200 metres long (Syms 1979). These people participated in continent-wide trade networks, and the shell gorget from the Killarney area (Plates 35 and 36) is a characteristic trait of their material culture. Many of the mounds along Antler Creek probably date to this period. The Devils Lake-Sourisford peoples may have been related through a common ancient ancestry, or influenced by contact with the so-called Mississippian peoples who lived along the middle and lower reaches

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4 Editor's note.

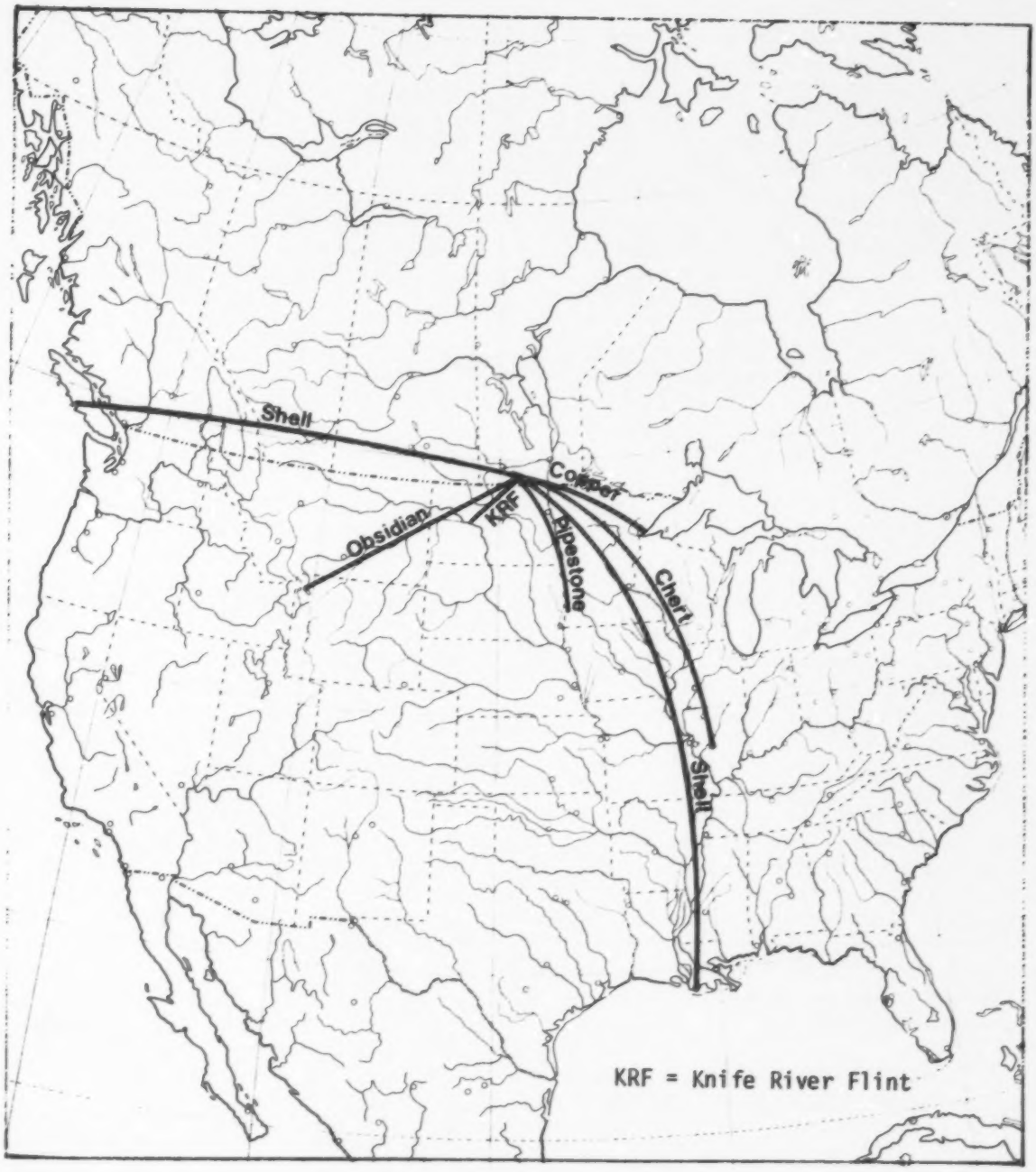

Fig. 20 Exotic raw materials that occur in artifact form in southwestern Manitoba and their places of origin.

of the Mississippi River (L. Syms personal communication).[5] They, in turn, drew much of their cultural influence from the high civilizations of Mexico.

A great variety of projectile points appeared during the Late Prehistoric Period. The early points from this period are Sonota (Plate 14 A-H) and Besant (Plate 12), that were used on atlatl darts, and Avonlea (Plate 15) that represent the introduction of the bow and arrow. Prairie and Plains Side-notched arrowheads (Plates 16, 17) are characteristic of the closing centuries of the Late Prehistoric Period. Plains Side-notched points were used until the gun (Plate 18 G) replaced the bow. There are a number of varieties within each of these types.

Bison continued to be the major food resource in the Turtle Mountain region during the Late Prehistoric Period. This reliance, however, should not be stressed to the exclusion of other resources -- the Plains peoples also hunted antelope, deer, elk, rabbits, badgers, raccoons, muskrats and waterfowl. On Turtle Mountain the people also hunted moose, bear, beaver and perhaps caribou (Fig. 21). The region was certainly large enough to support a few bands on a year-round basis and other groups would have frequented the area during peak times when the buffalo moved through. This way of life continued unchanged until the Europeans arrived.

The arrival of the La Vérendryes on the Western Plains in 1734 and the subsequent construction of strings of fur-trading posts in southern Manitoba ushered in a new era. The Native peoples changed their hunting activities to get extra furs to trade with the English and French. The early historic records document the presence of a number of tribes in southwestern Manitoba, each with their own distinct dialect, customs and artifact styles. This, for a time, was the central territory of the "Assiniboine". The "Mandan" and perhaps the "Hidatsa" groups possibly lived in the region periodically. The Mandan definitely traded in the area in the early historic, and possibly during prehistoric times (L. Syms personal communication).[6] The Dakota, Gros Ventre and Crow made occasional visits. Judging from the diversity of archaeological discoveries in the region, we can assume that this situation of overlapping populations and territories was similar for much of the Late Prehistoric Period.

This concludes our brief account of the prehistory of the Turtle Mountain region. The record is far from complete, and a great deal more needs to be learned. I hope that this overview has helped you to develop a new awareness of our ancient heritage and the Native peoples' accomplishments, and has alerted you to the rich, exciting and dynamic record of prehistory in southwestern Manitoba.

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5 Editor's note.

6 Editor's note.

Fig. 21 It is possible that the forested uplands of the Turtle Mountains served as winter hunting grounds during the Late Prehistoric Period.

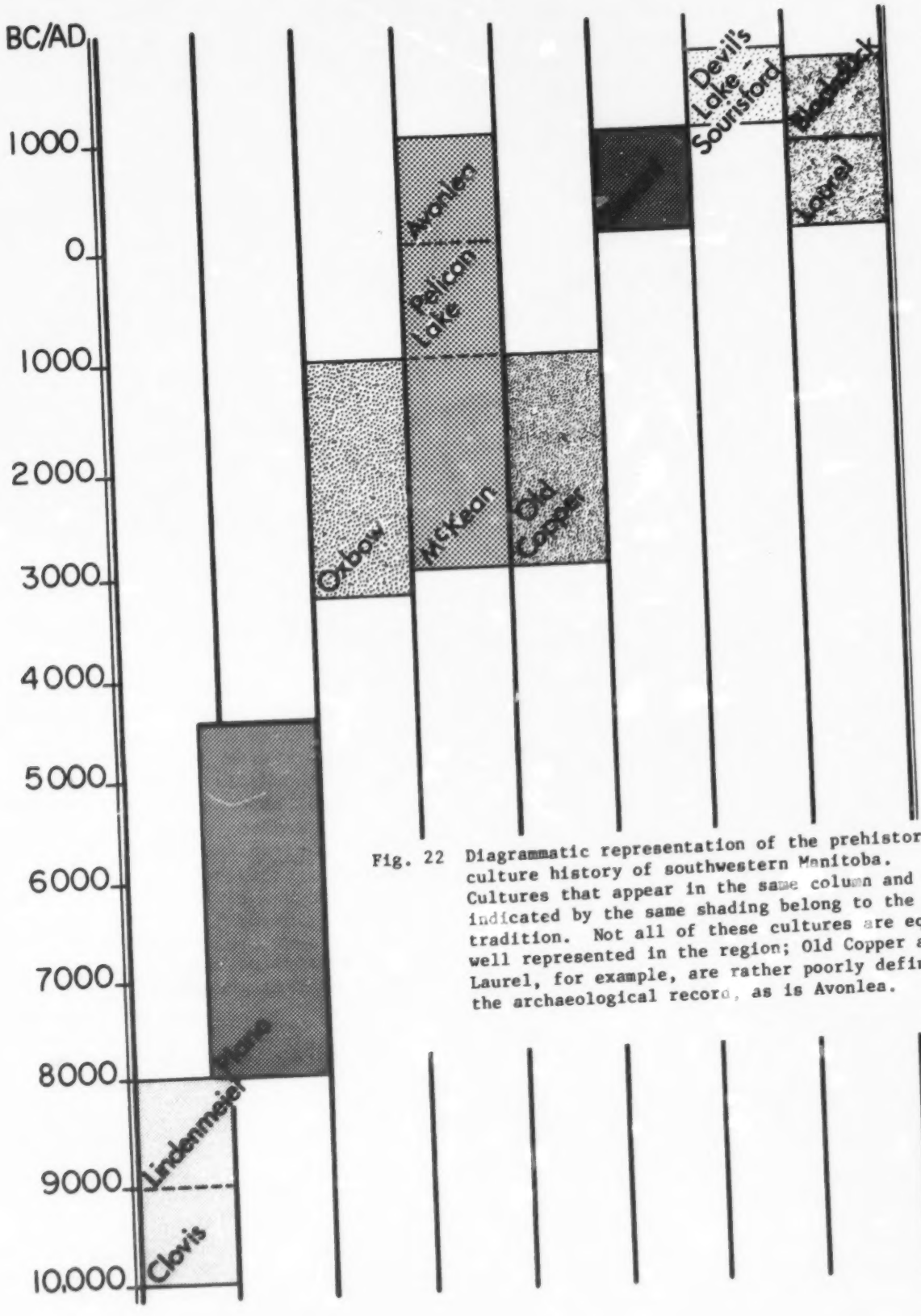

Fig. 22 Diagrammatic representation of the prehistoric culture history of southwestern Manitoba. Cultures that appear in the same column and indicated by the same shading belong to the same tradition. Not all of these cultures are equally well represented in the region; Old Copper and Laurel, for example, are rather poorly defined in the archaeological record, as is Avonlea.

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11	After the style of Andre Durenceau.
12 A-C	Adapted from drawings appearing in "Handbook of Aboriginal American Antiquities", by W. Holmes, Bureau of American Ethnology Bulletin No. 10, 1919.
12 D	From "Handbook of Aboriginal American Antiquities", by W. Holmes, Bureau of American Ethnology Bulletin No. 10, 1919.
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